



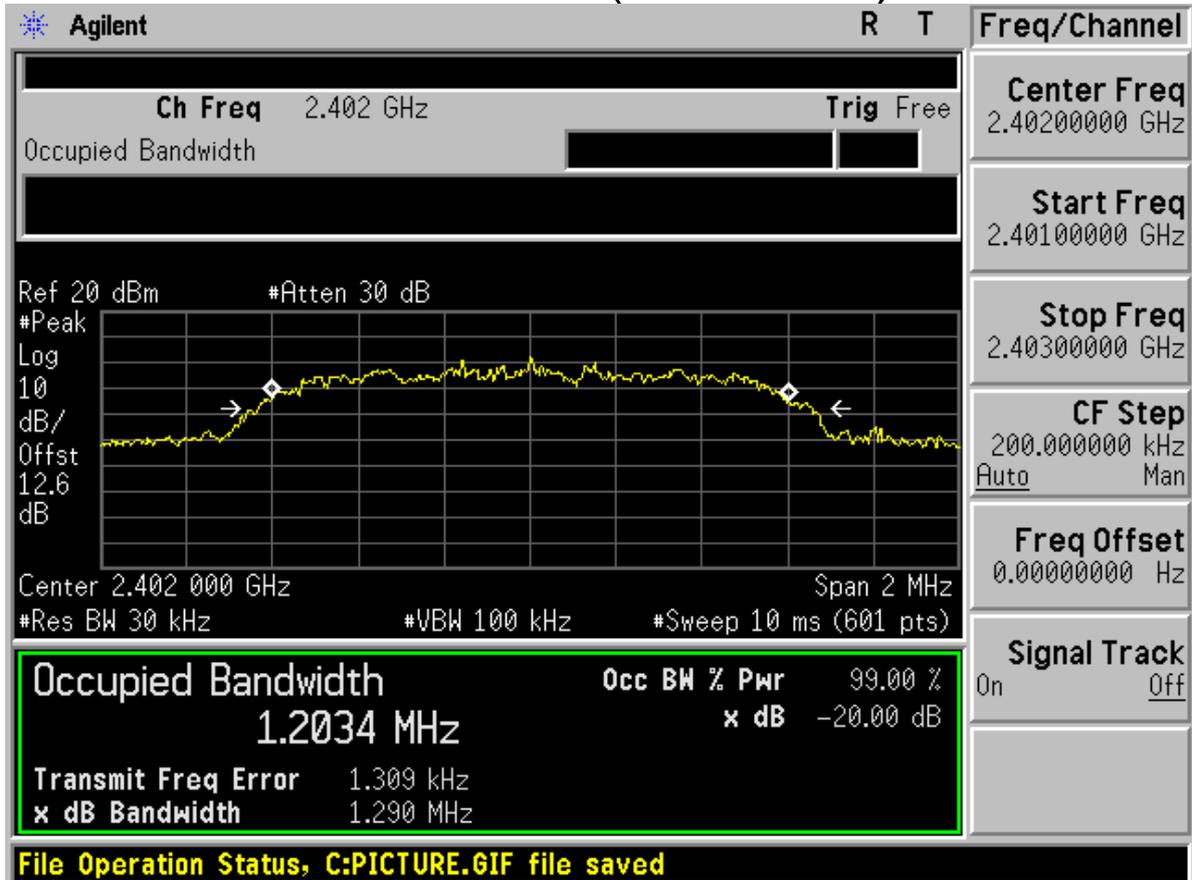
# Appendix A

## 20dB bandwidth measurement

According to FCC Part 15.247 (a) (1)



# Modulation: $\pi/4$ -DQPSK Channel 0 (2402MHz)





# Channel 40 (2442MHz)

Agilent
R T

**Ch Freq** 2.442 GHz **Trig** Free

Occupied Bandwidth

**Freq/Channel**

**Center Freq**  
2.44200000 GHz

**Start Freq**  
2.44100000 GHz

**Stop Freq**  
2.44300000 GHz

**CF Step**  
200.000000 kHz  
Auto Man

**Freq Offset**  
0.00000000 Hz

**Signal Track**  
On Off

Ref 20 dBm #Atten 30 dB

Center 2.442 000 GHz Span 2 MHz  
#Res BW 30 kHz #VBW 100 kHz #Sweep 10 ms (601 pts)

<b>Occupied Bandwidth</b>	<b>Occ BW % Pwr</b> 99.00 %
1.1928 MHz	x dB -20.00 dB
<b>Transmit Freq Error</b> -1.003 kHz	
<b>x dB Bandwidth</b> 1.283 MHz	

**File Operation Status, C:PICTURE.GIF file saved**



## Channel 78 (2480MHz)



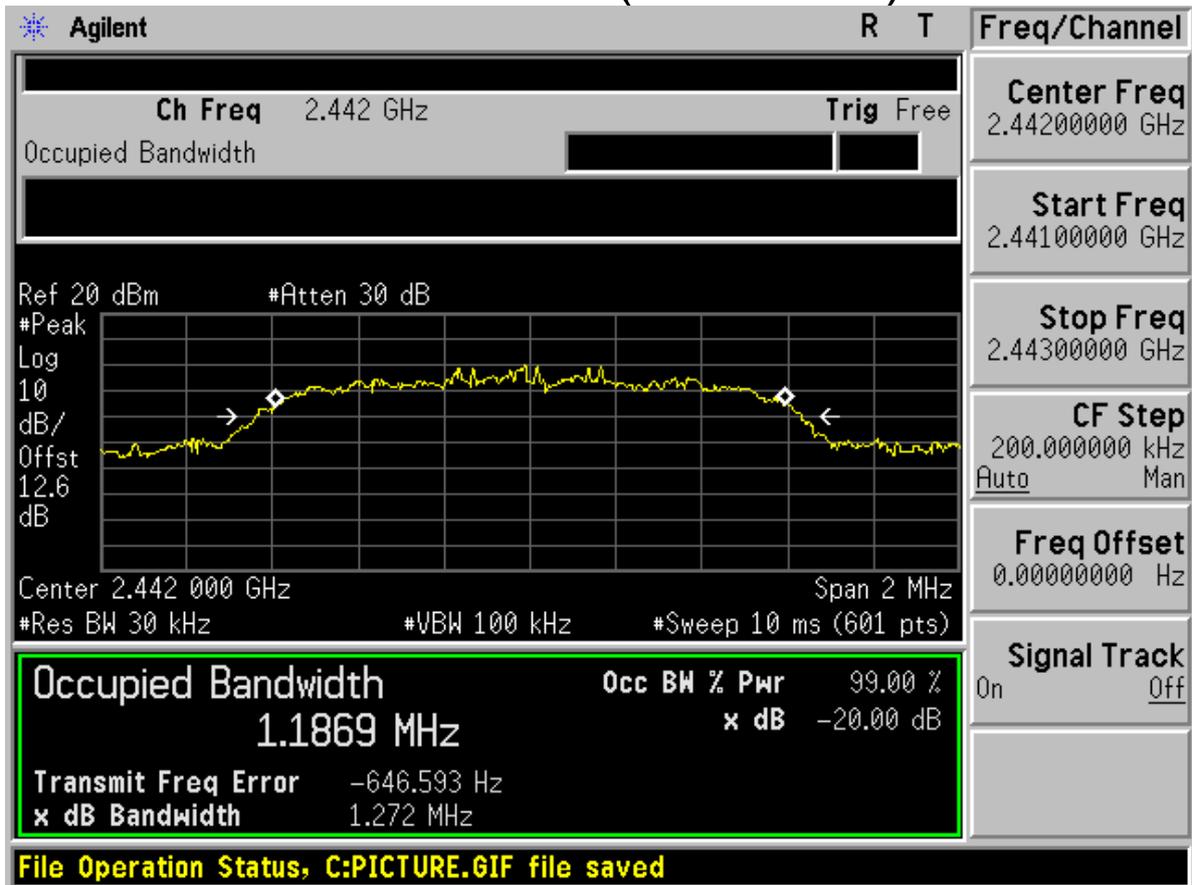


## Modulation: 8DPSK Channel 0 (2402MHz)





## Channel 40 (2442MHz)





## Channel 78 (2480MHz)





## **Appendix B**

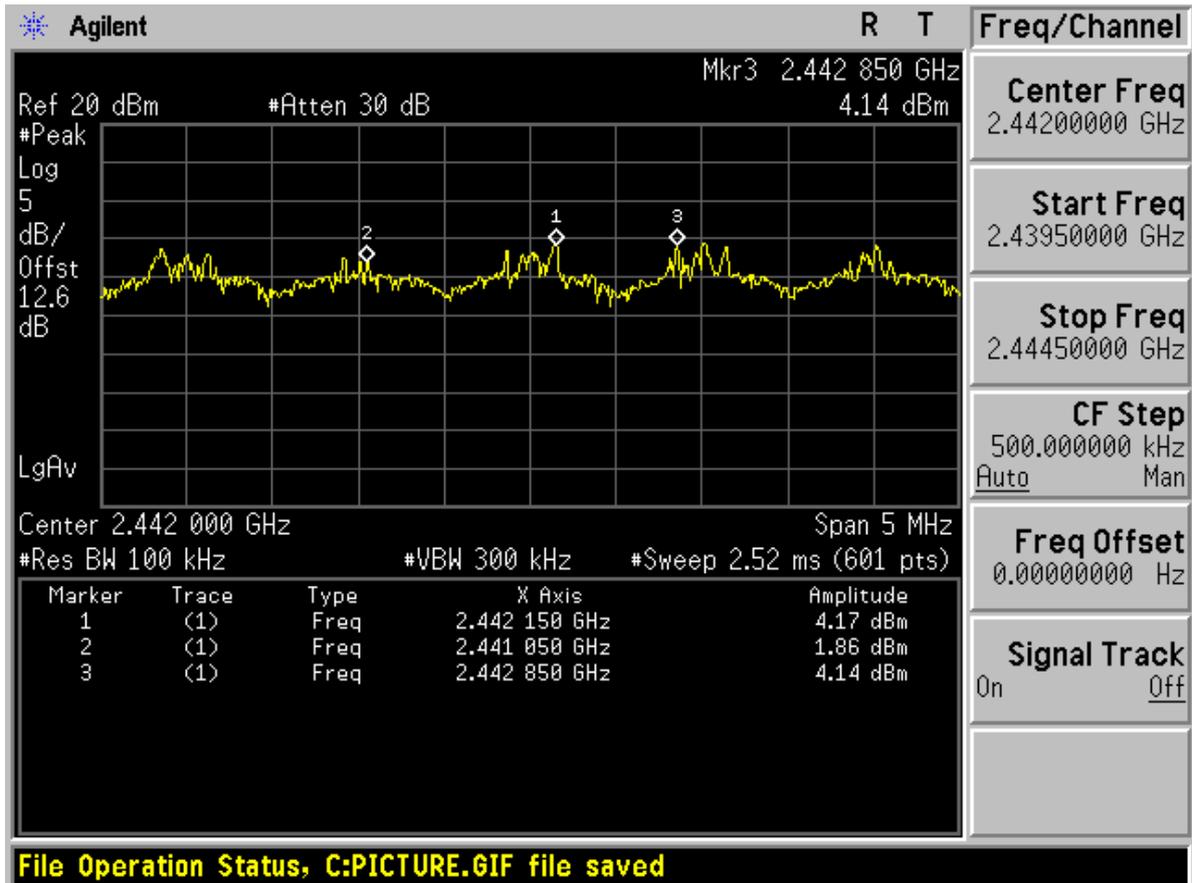
# Carrier frequency separation measurement

According to FCC Part 15.247 (a) (1)



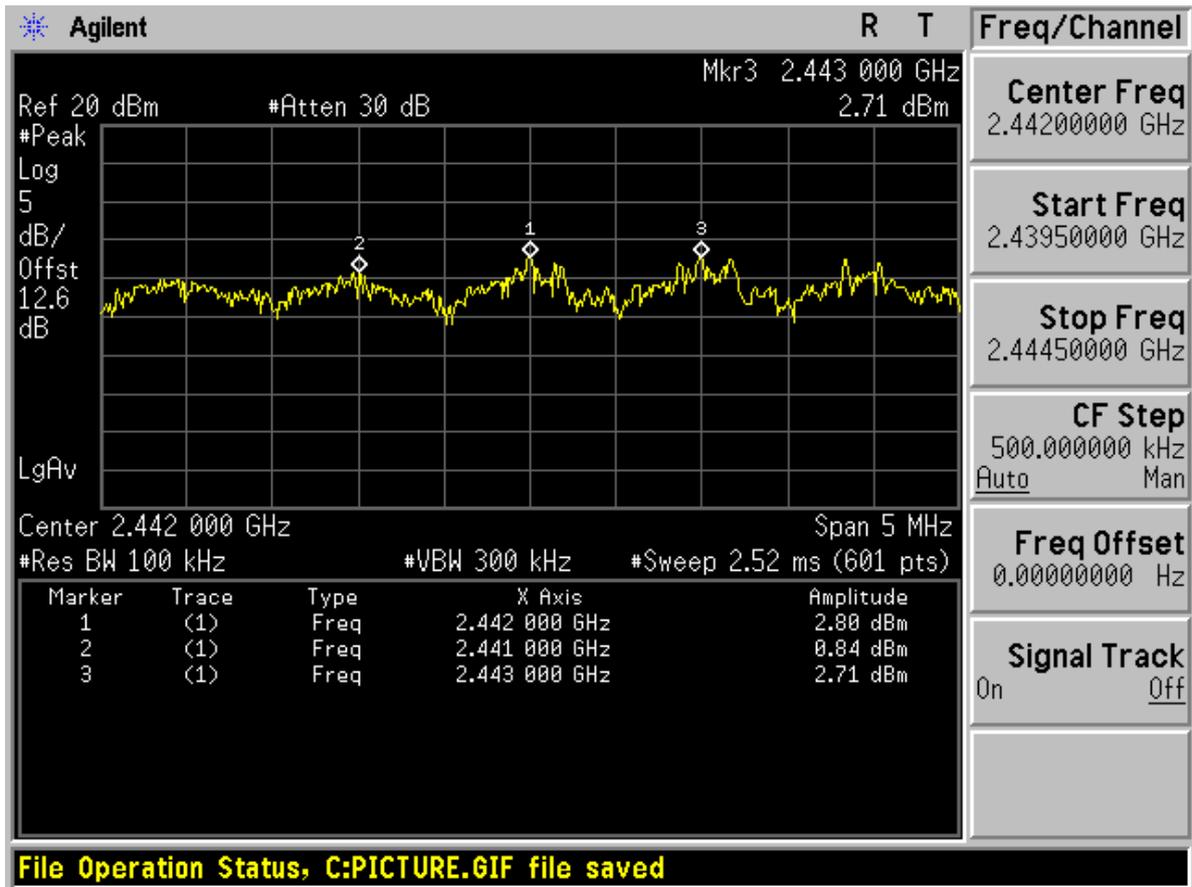
Modulation:  $\pi/4$ -DQPSK

Centred at Channel 40





## Modulation: 8DPSK Centred at Channel 40





## Appendix C

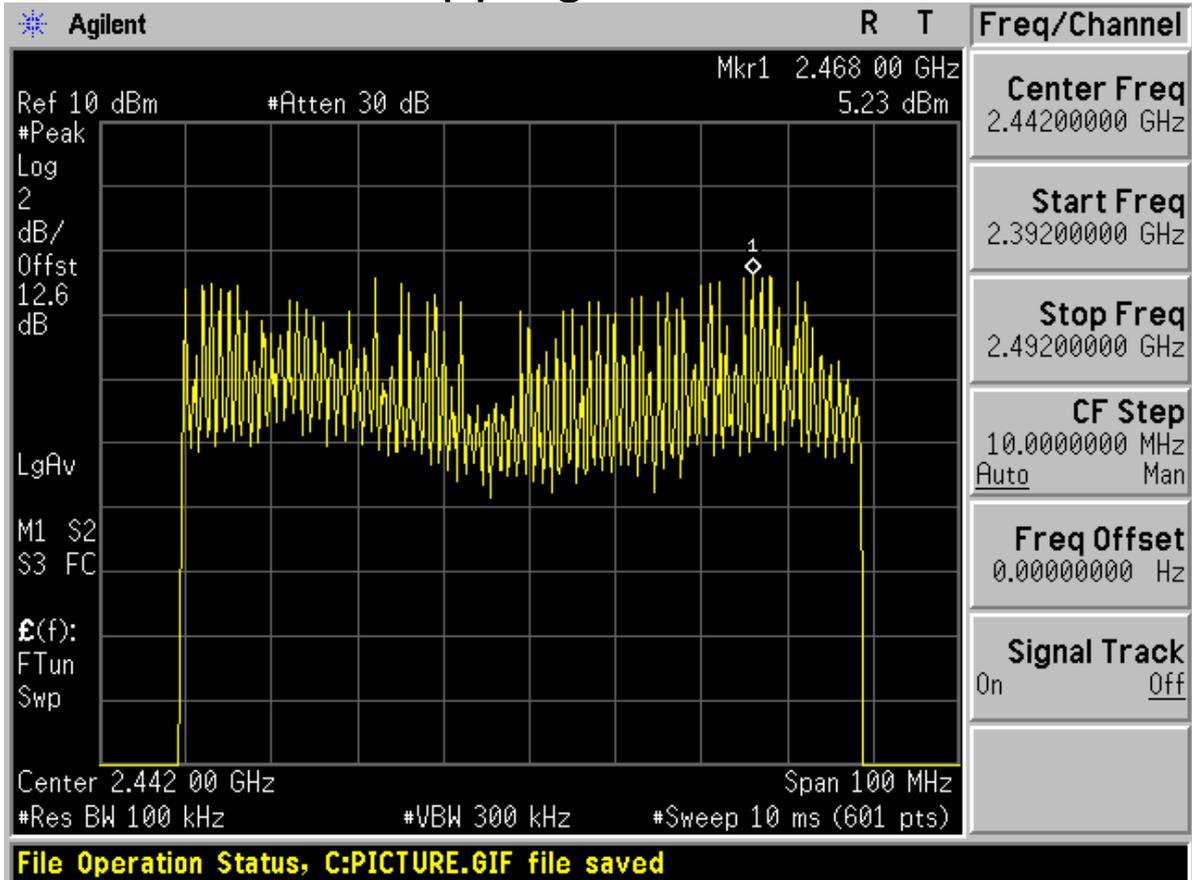
# Number of hopping channel

According to FCC Part 15.247 (a) (1) iii



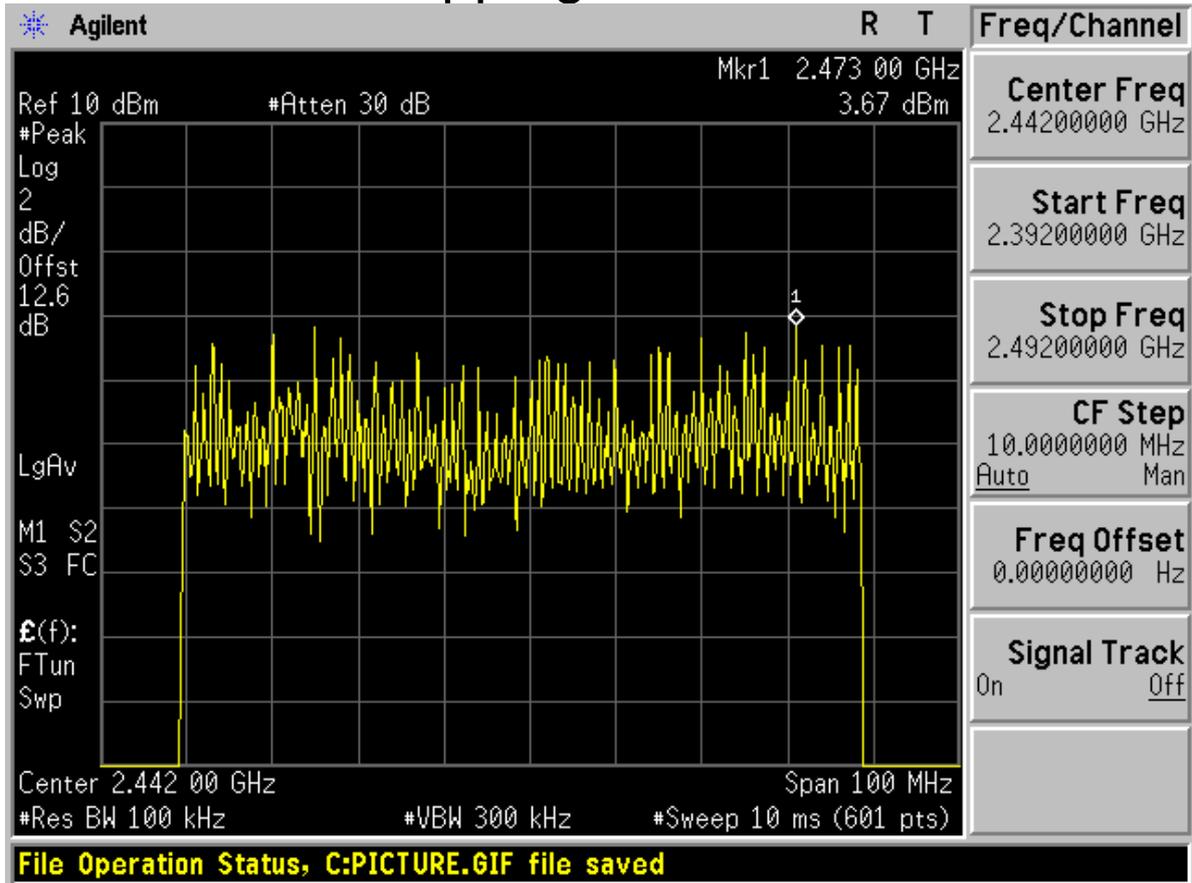
Modulation:  $\pi/4$ -DQPSK

Total hopping channels = 79





# Modulation: 8DPSK Total hopping channels = 79





# Appendix D

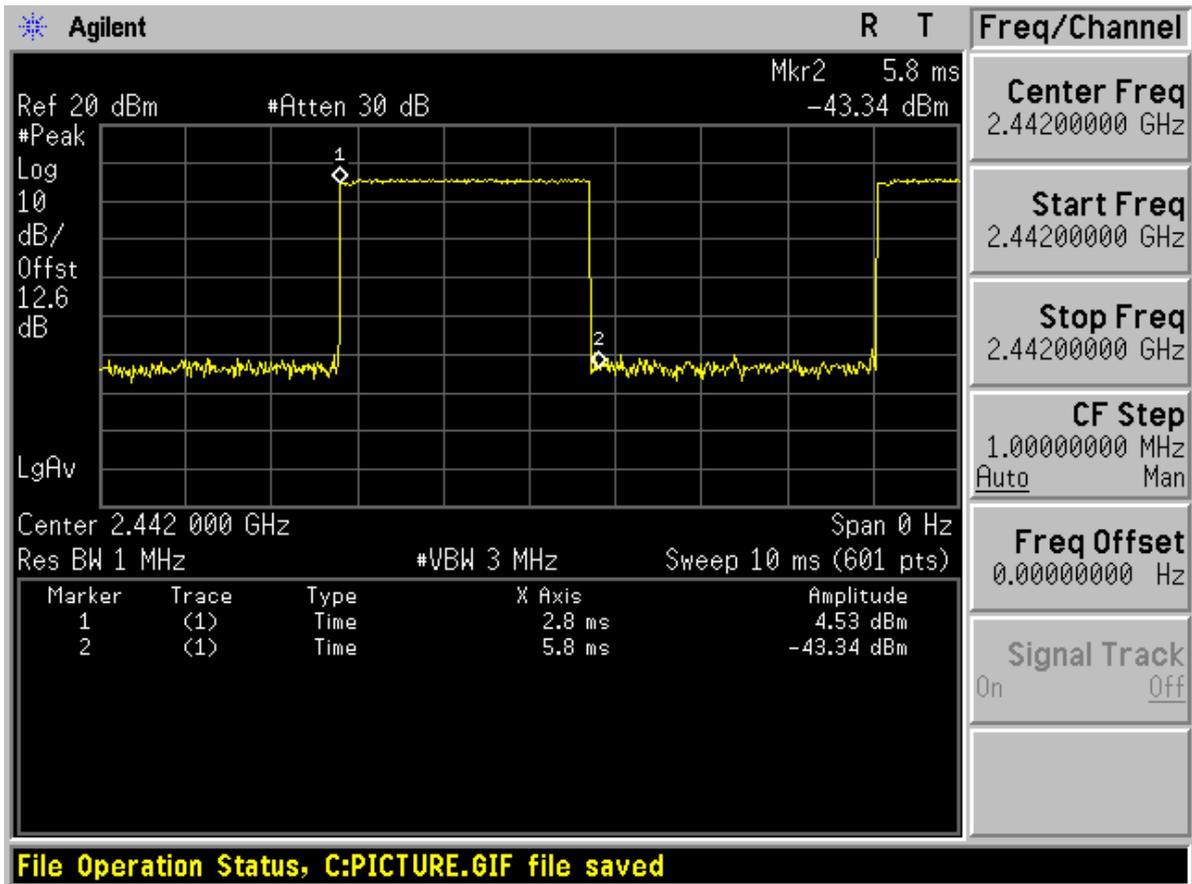
## Time of occupancy

According to FCC Part 15.247 (a) (1) iii



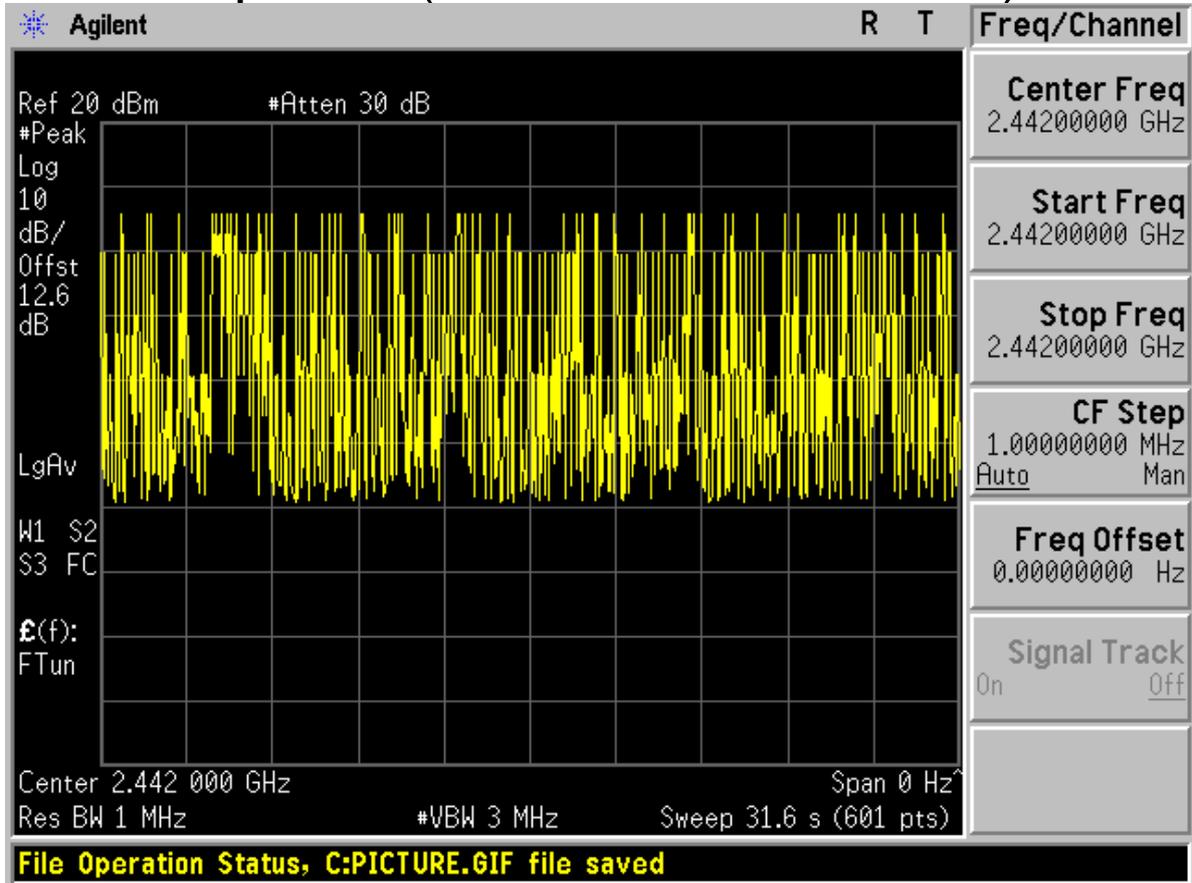
# Modulation: $\pi/4$ -DQPSK

## A burst (One time slot)





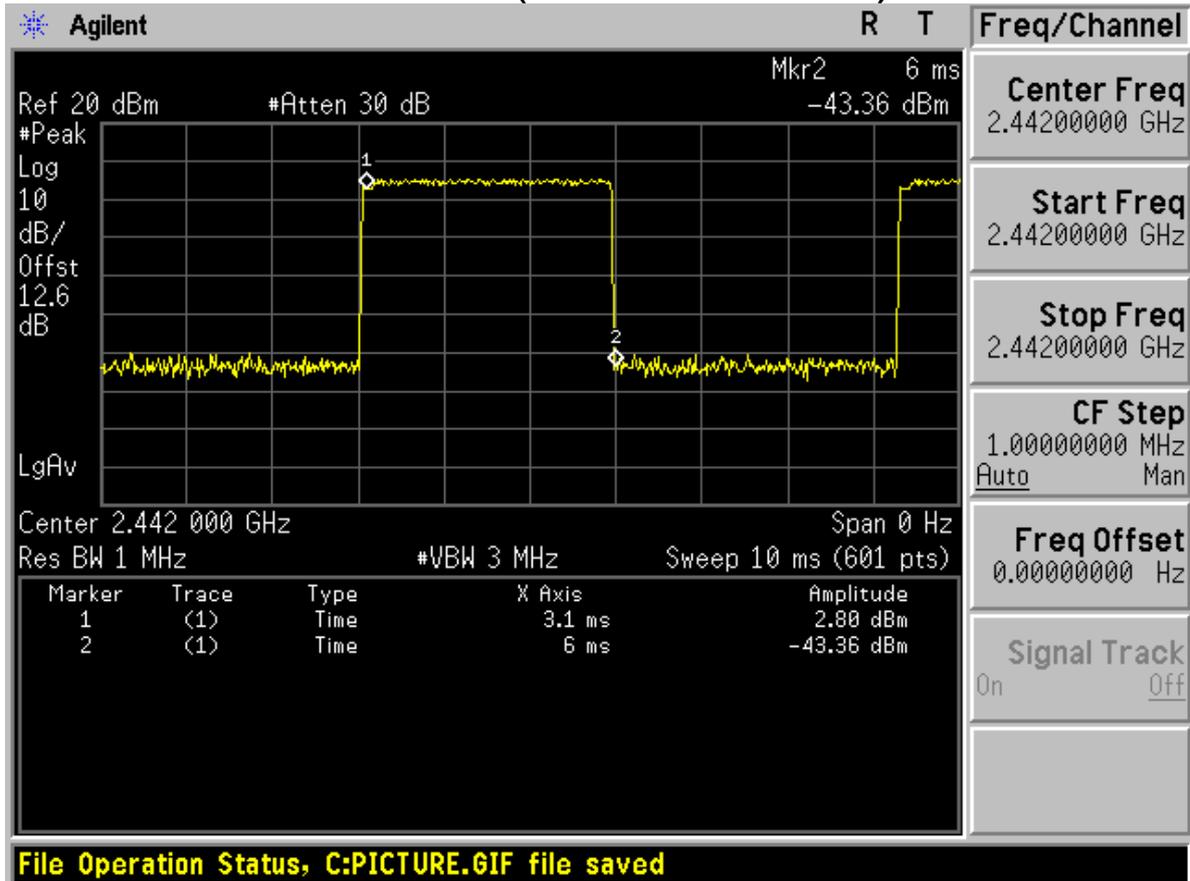
# A period (Less than 106.7 burst)





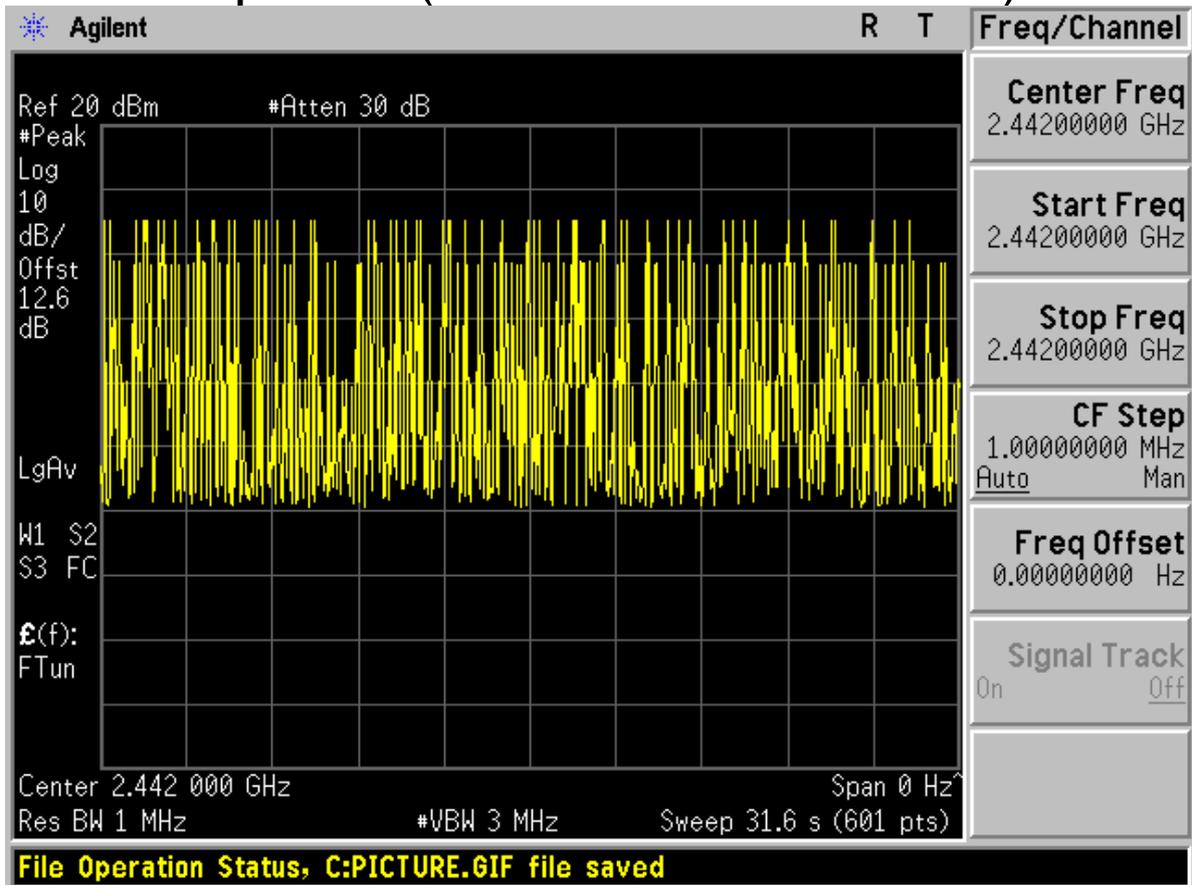
## Modulation: 8DPSK

### A burst (One time slot)





## A period (Less than 106.7 burst)





# Appendix E

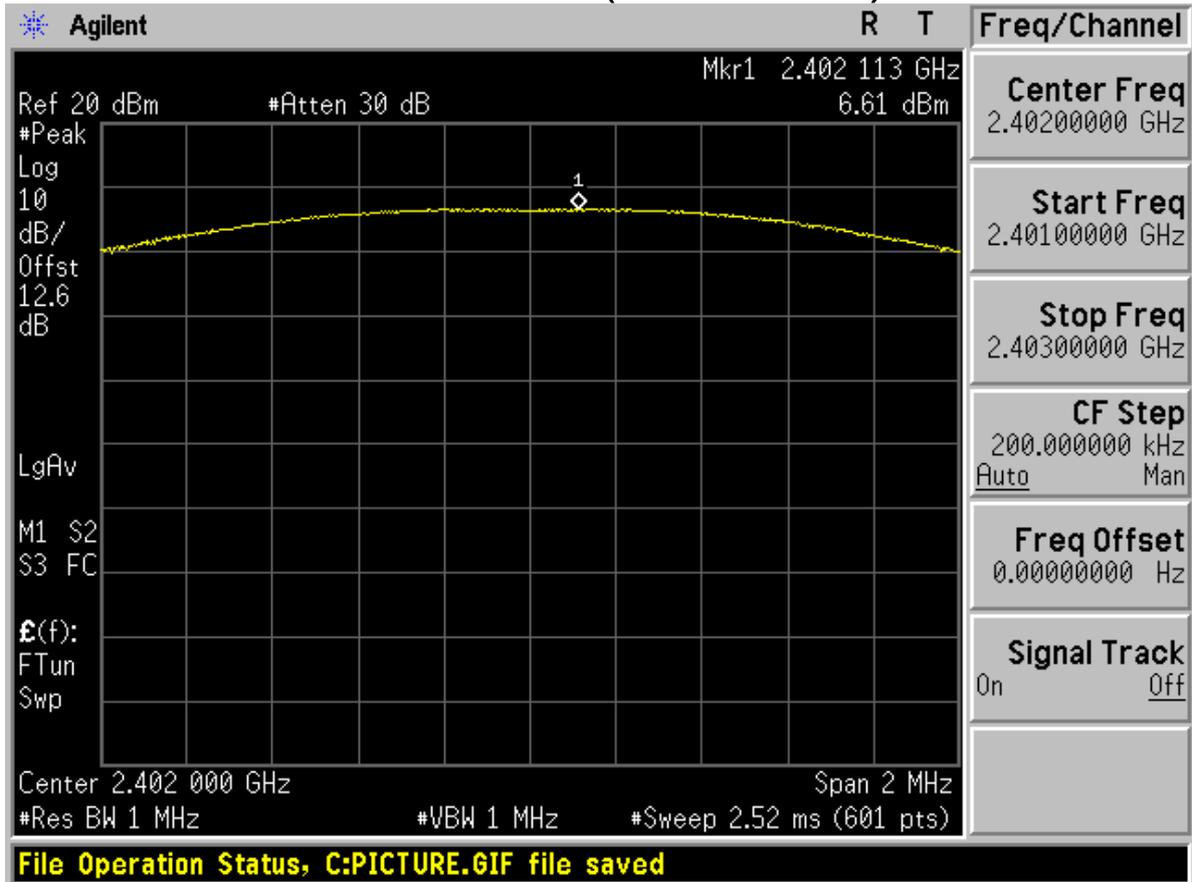
## Peak output power

According to FCC Part 15.247 (b) (1)



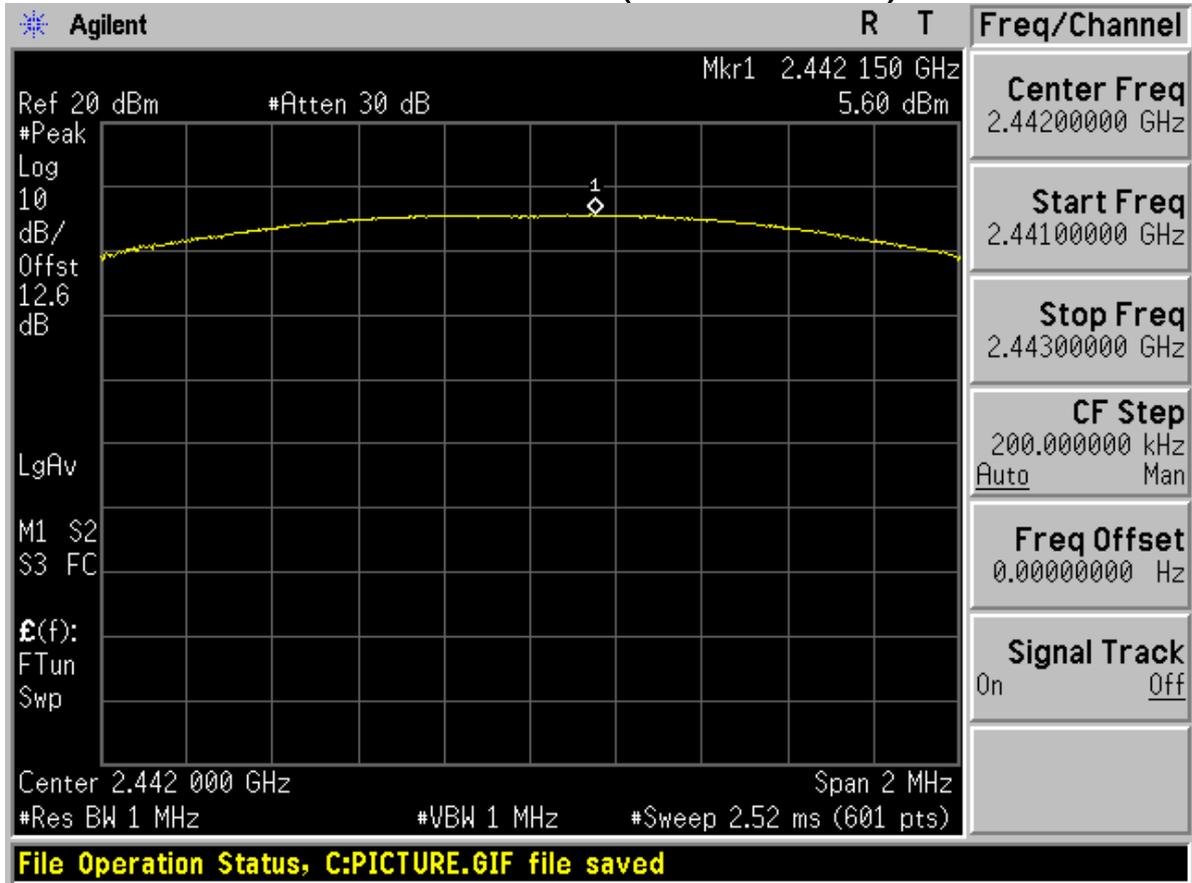
Modulation:  $\pi/4$ -DQPSK

Channel 0 (2402MHz)



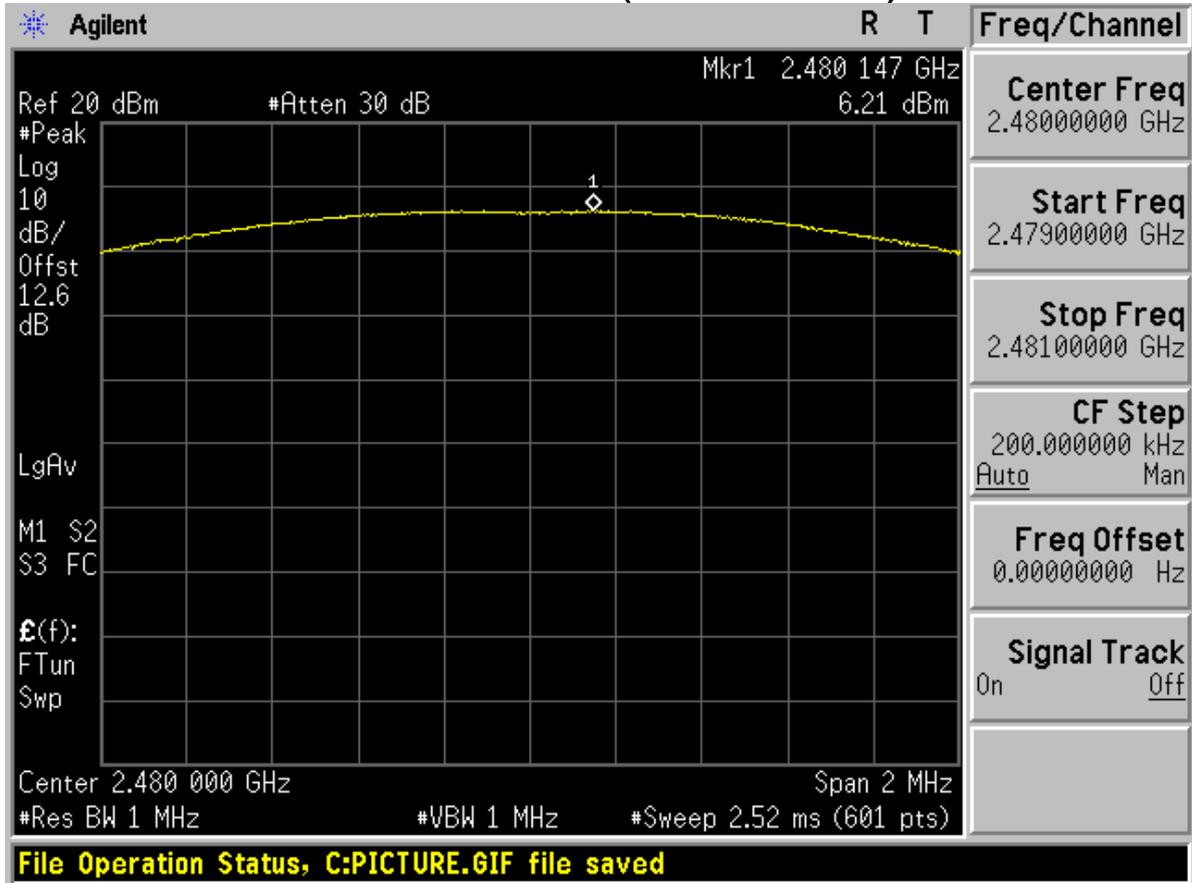


# Channel 40 (2442MHz)



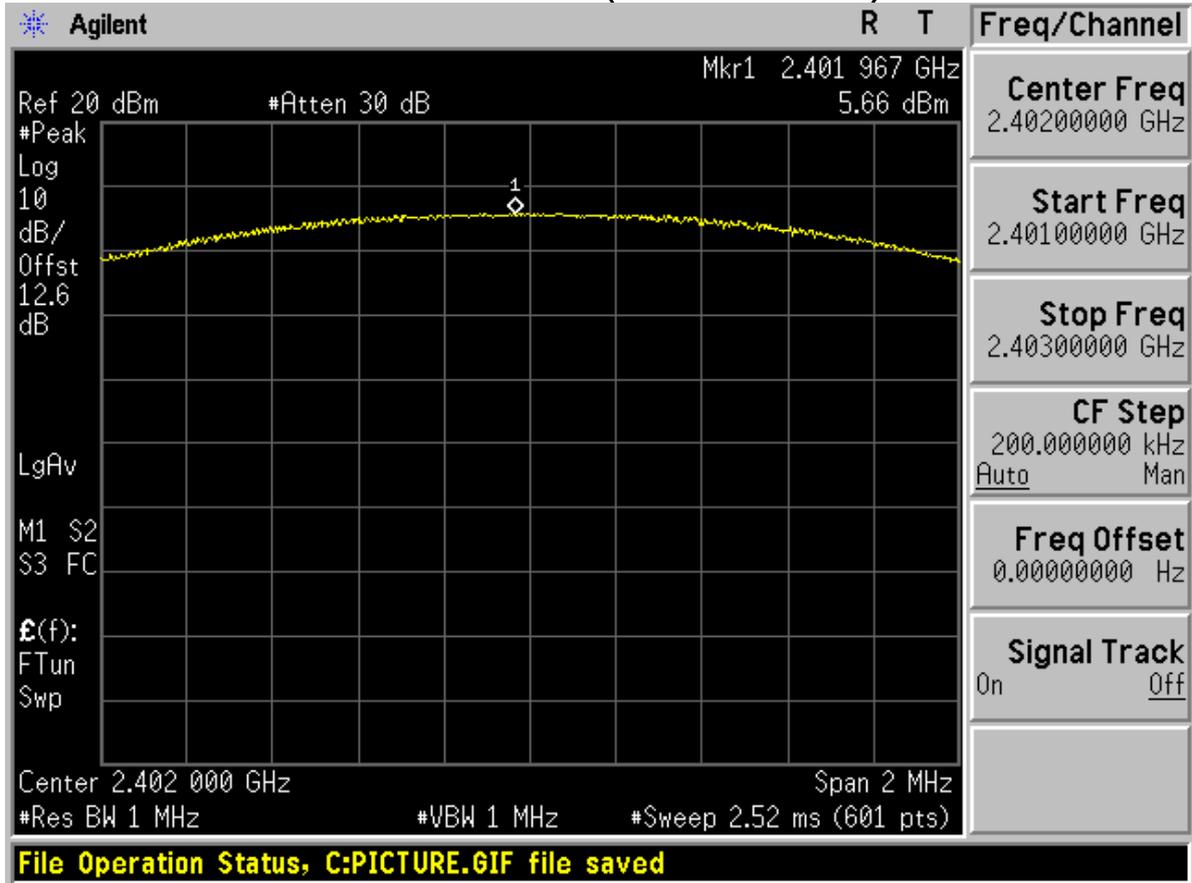


# Channel 78 (2480MHz)



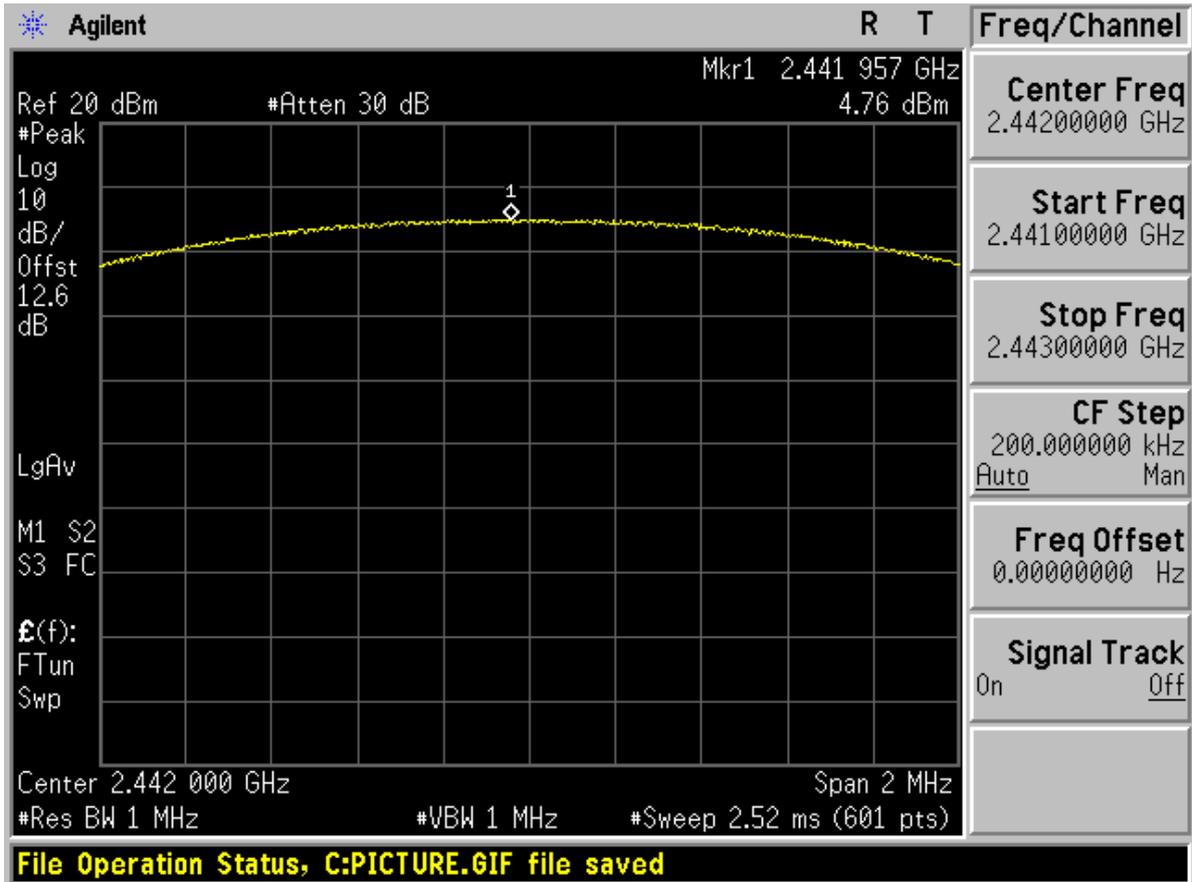


# Modulation: 8DPSK Channel 0 (2402MHz)



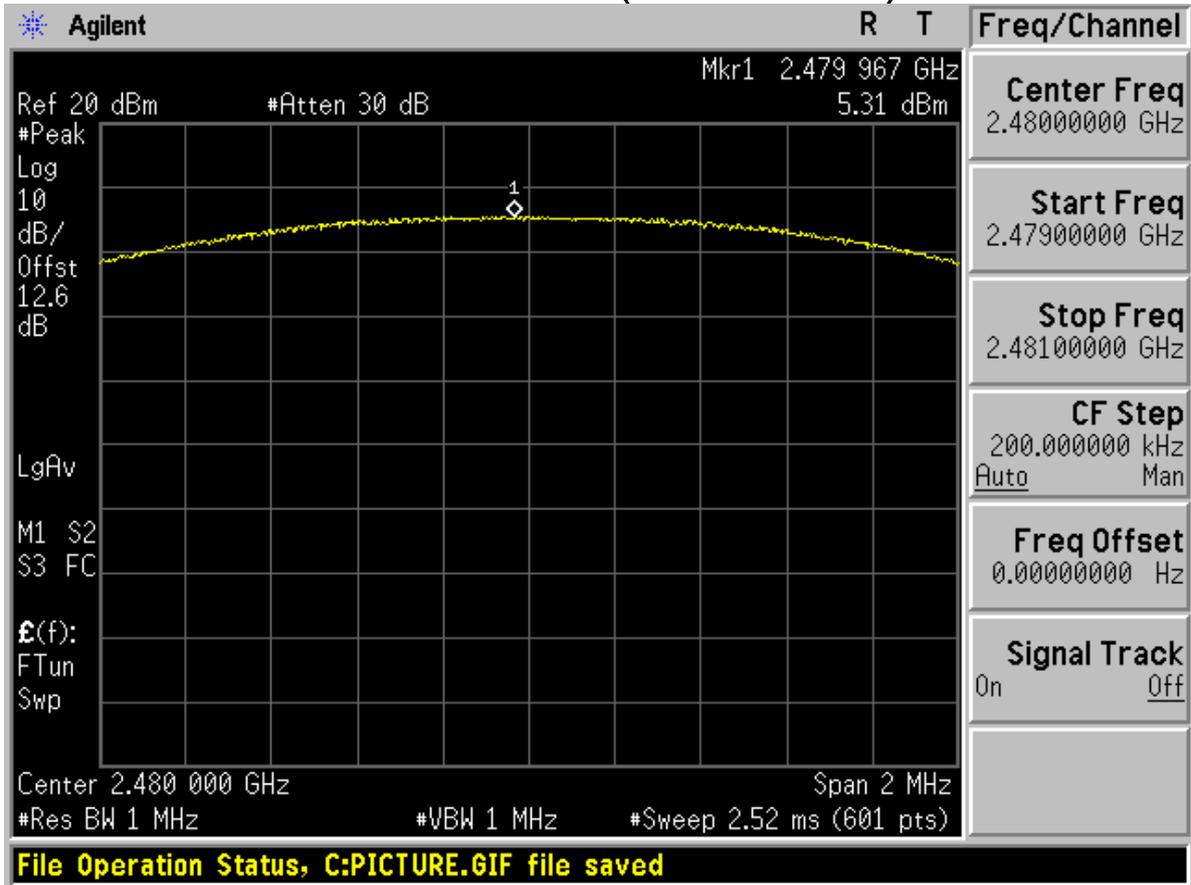


# Channel 40 (2442MHz)





## Channel 78 (2480MHz)





# Appendix F

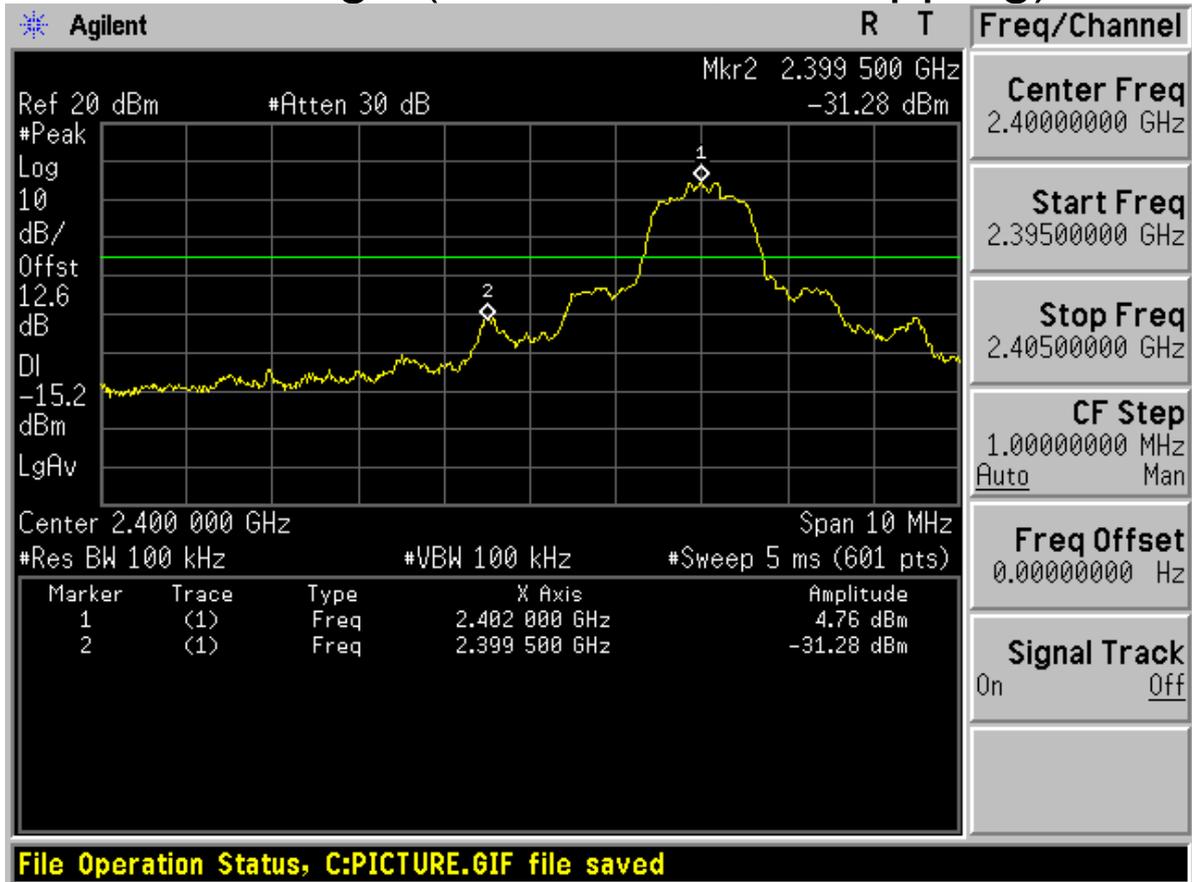
## Band edge spurious emission

According to FCC Part 15.247 (d)



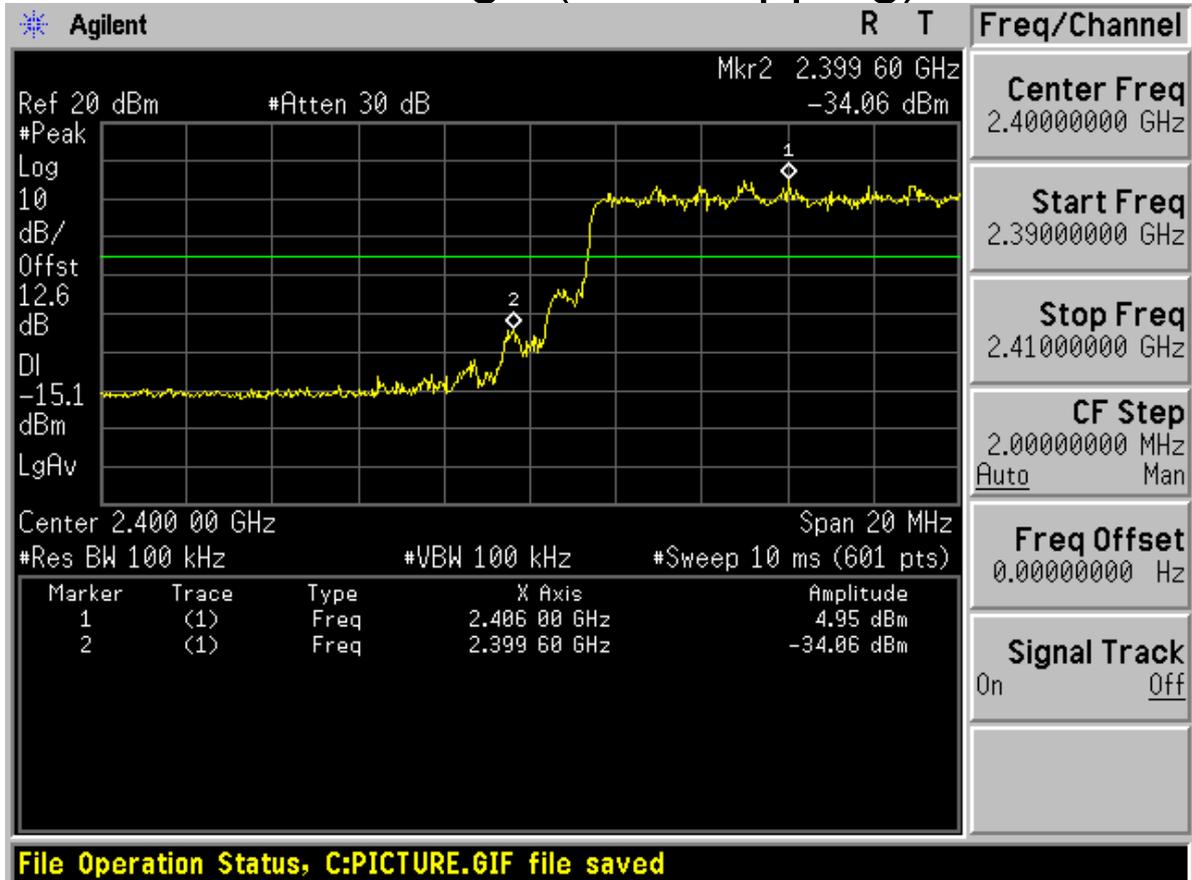
Modulation:  $\pi/4$ -DQPSK

Low edge (Channel 0, no hopping)



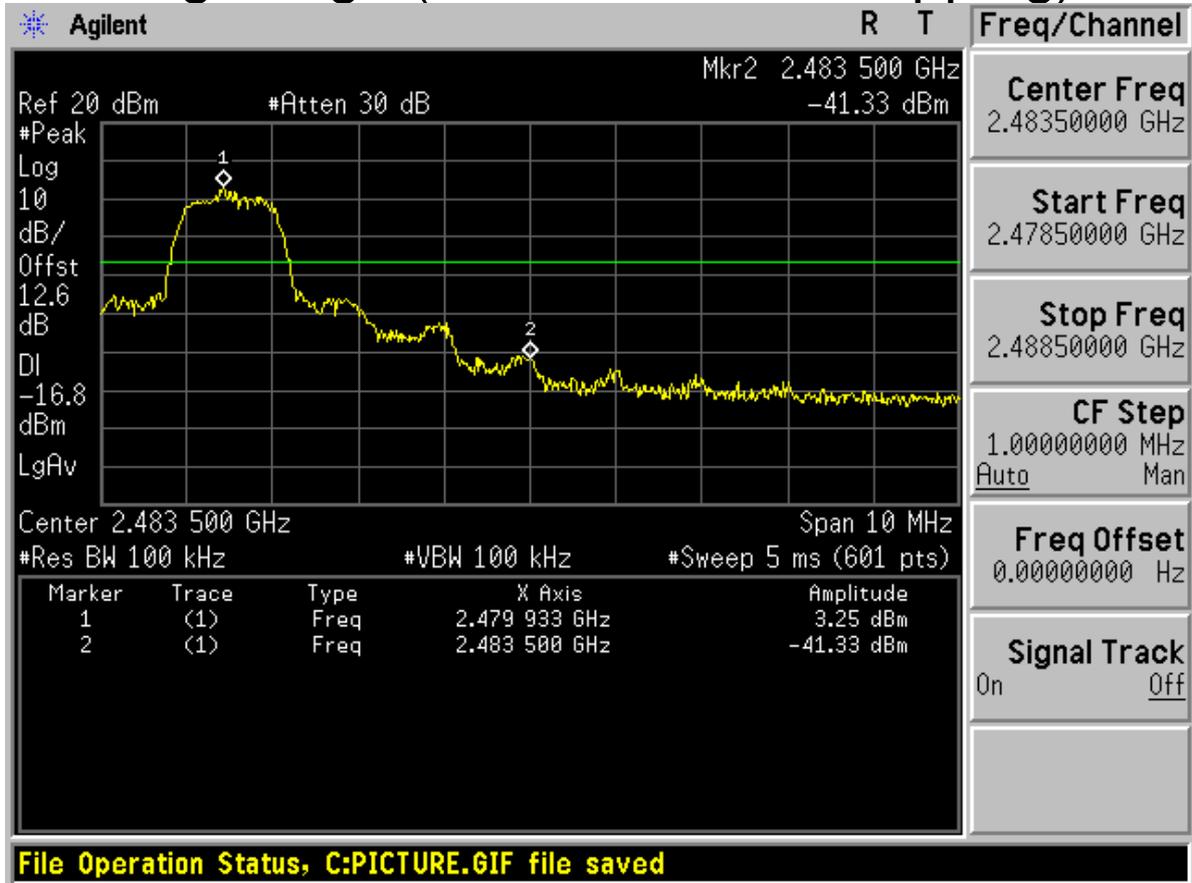


# Low edge (with hopping)



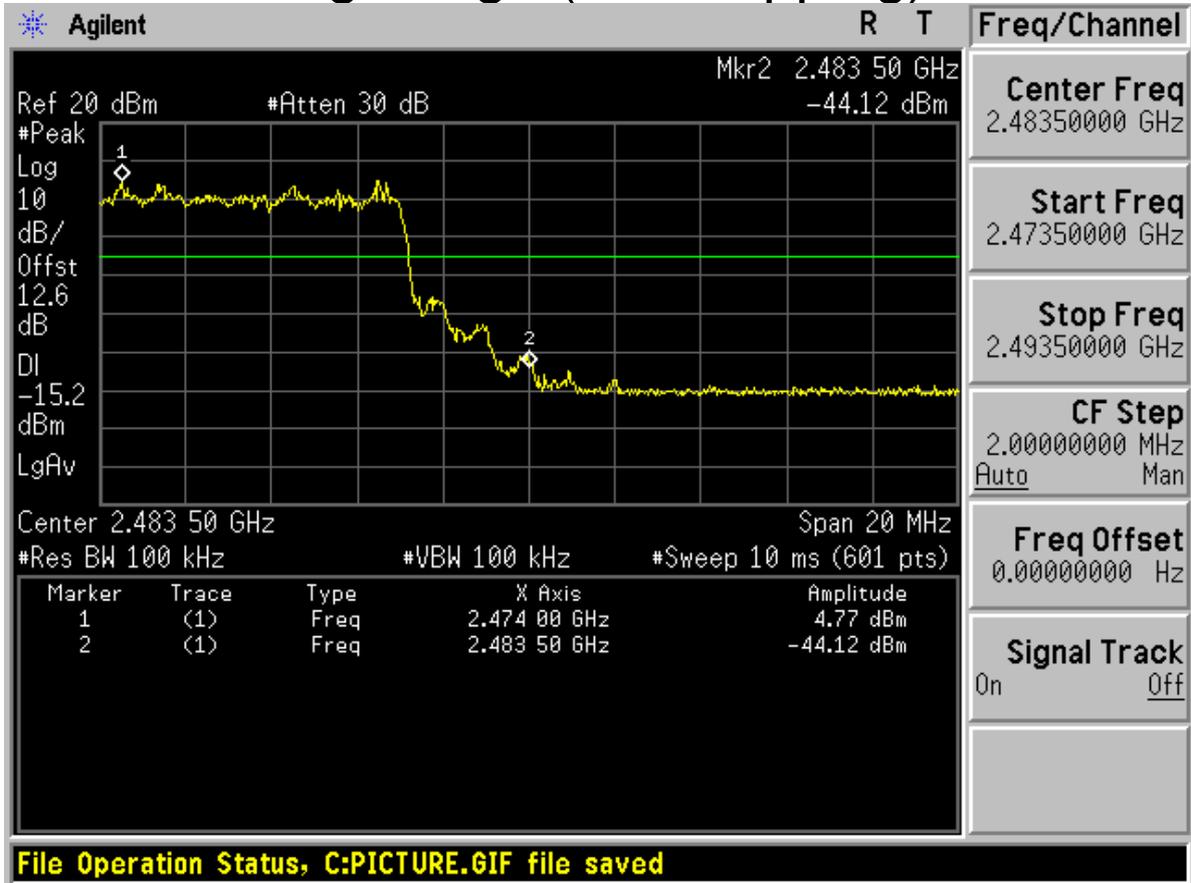


# High edge (Channel 78, no hopping)



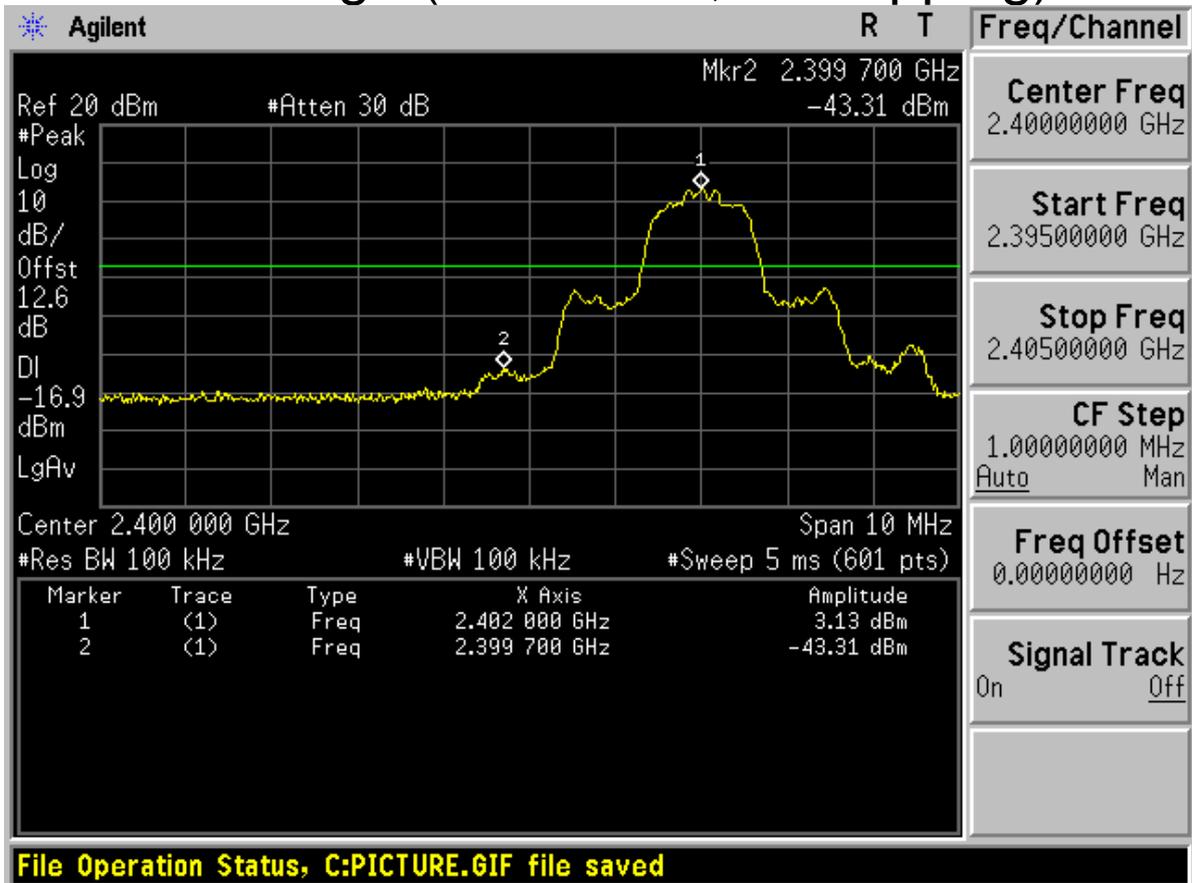


# High edge (with hopping)



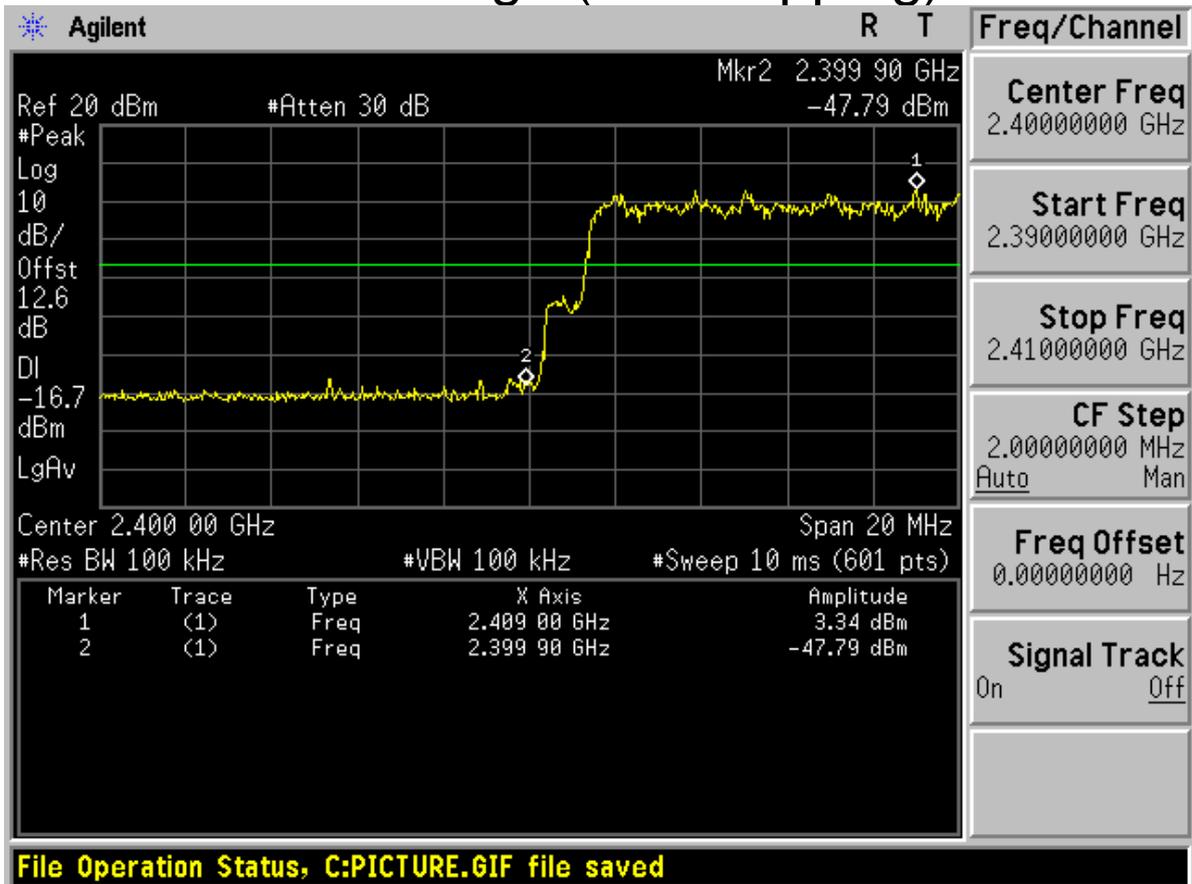


## Modulation: 8DPSK Low edge (Channel 0, no hopping)



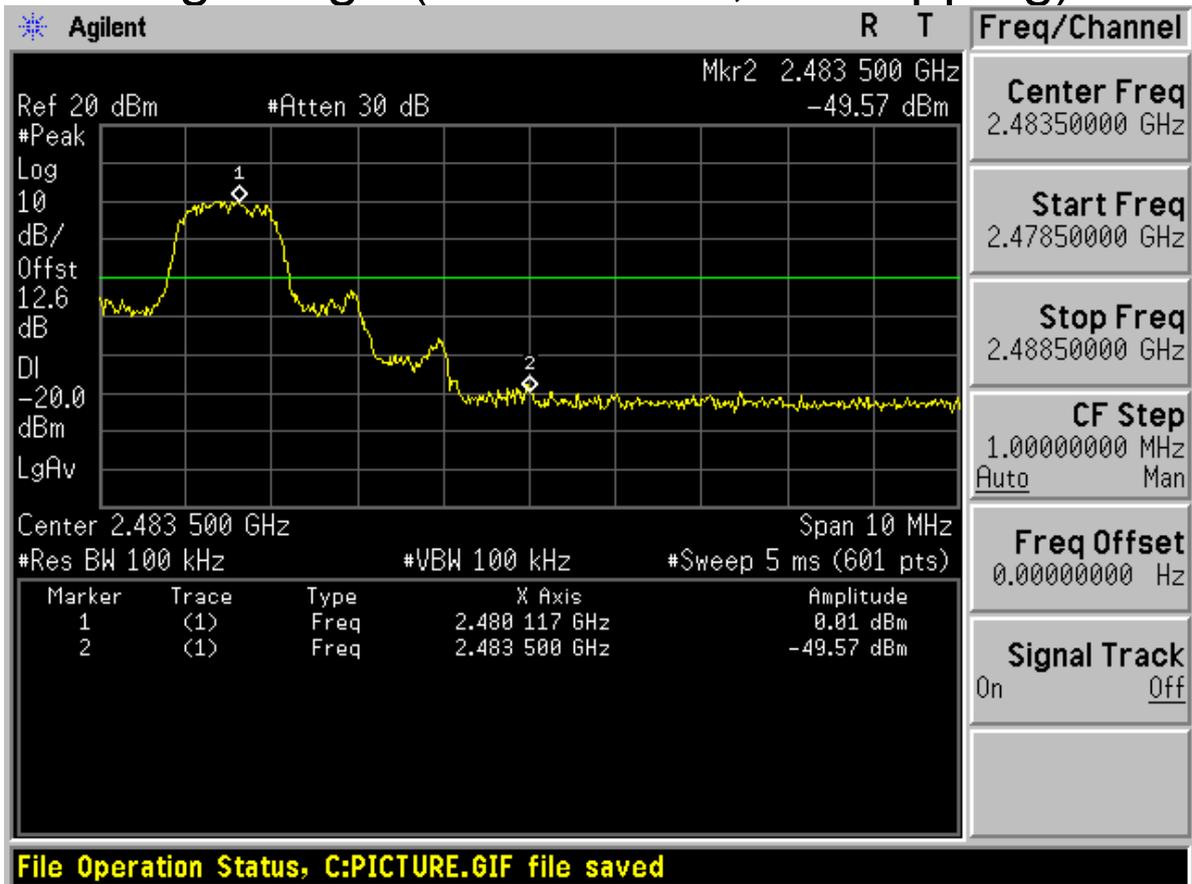


## Low edge (with hopping)



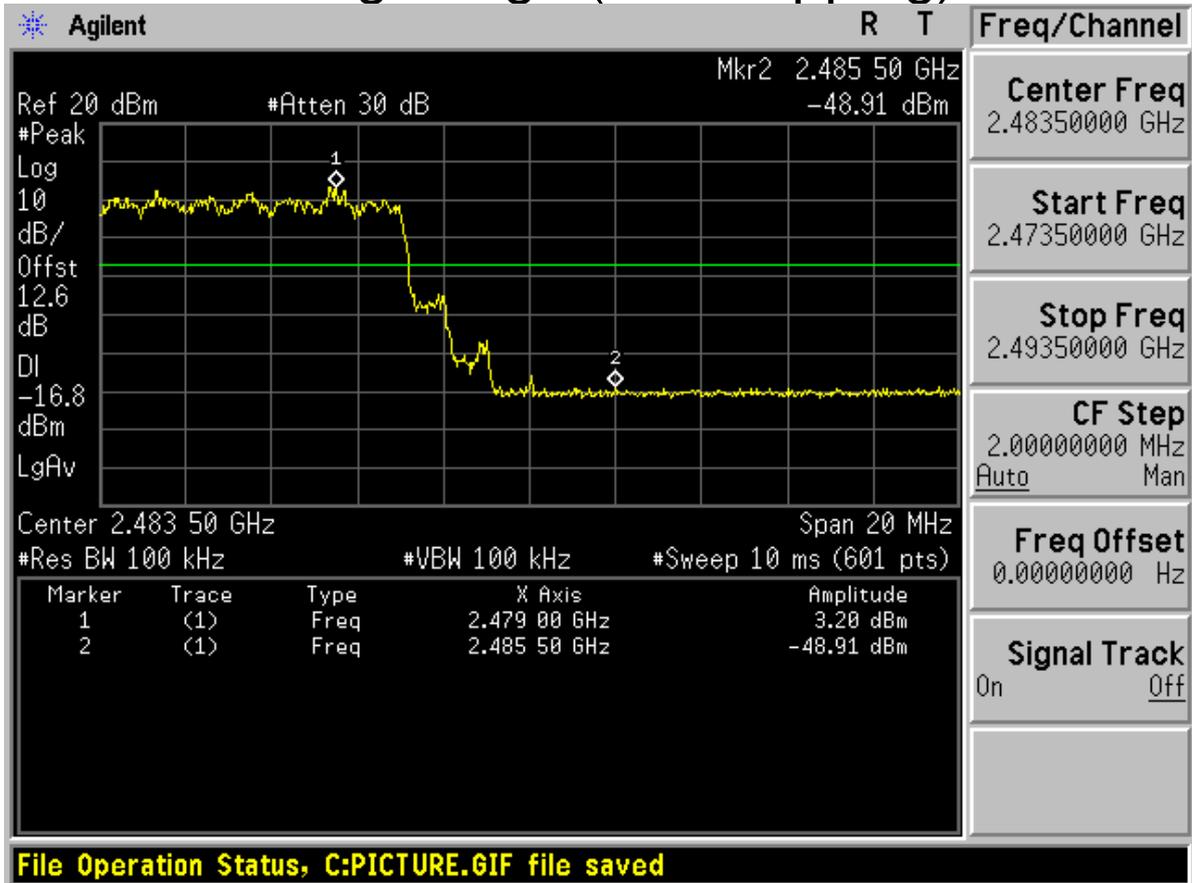


## High edge (Channel 78, no hopping)





## High edge (with hopping)





# Appendix G

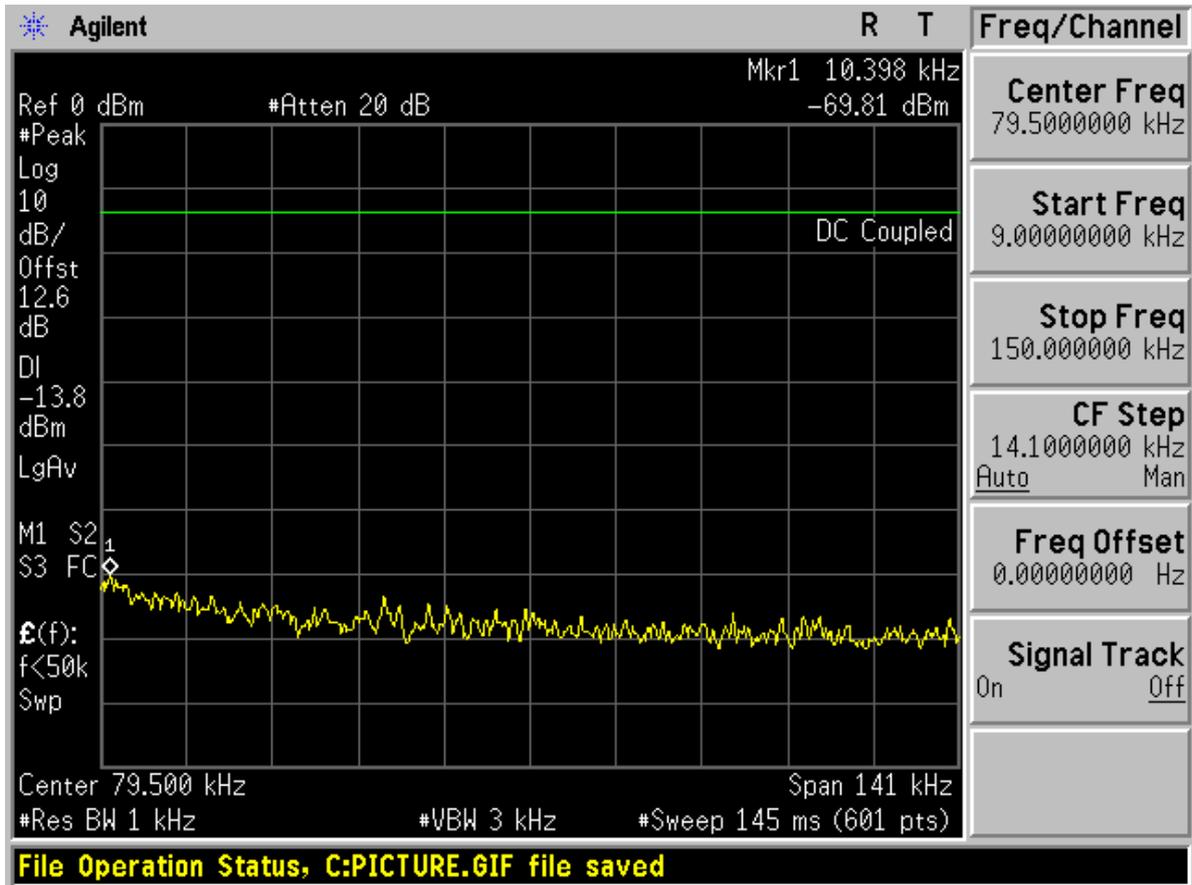
## Conducted RF spurious

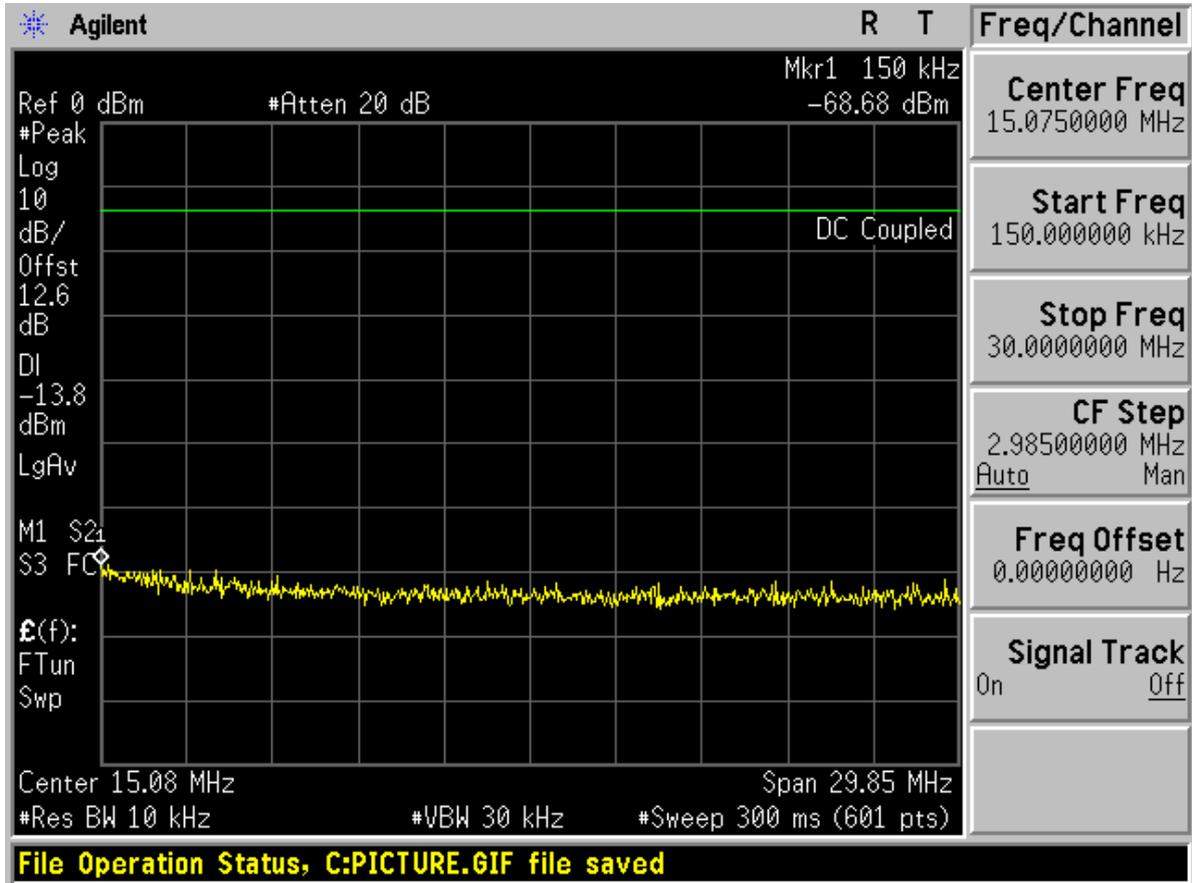
According to FCC Part 15.247 (d)

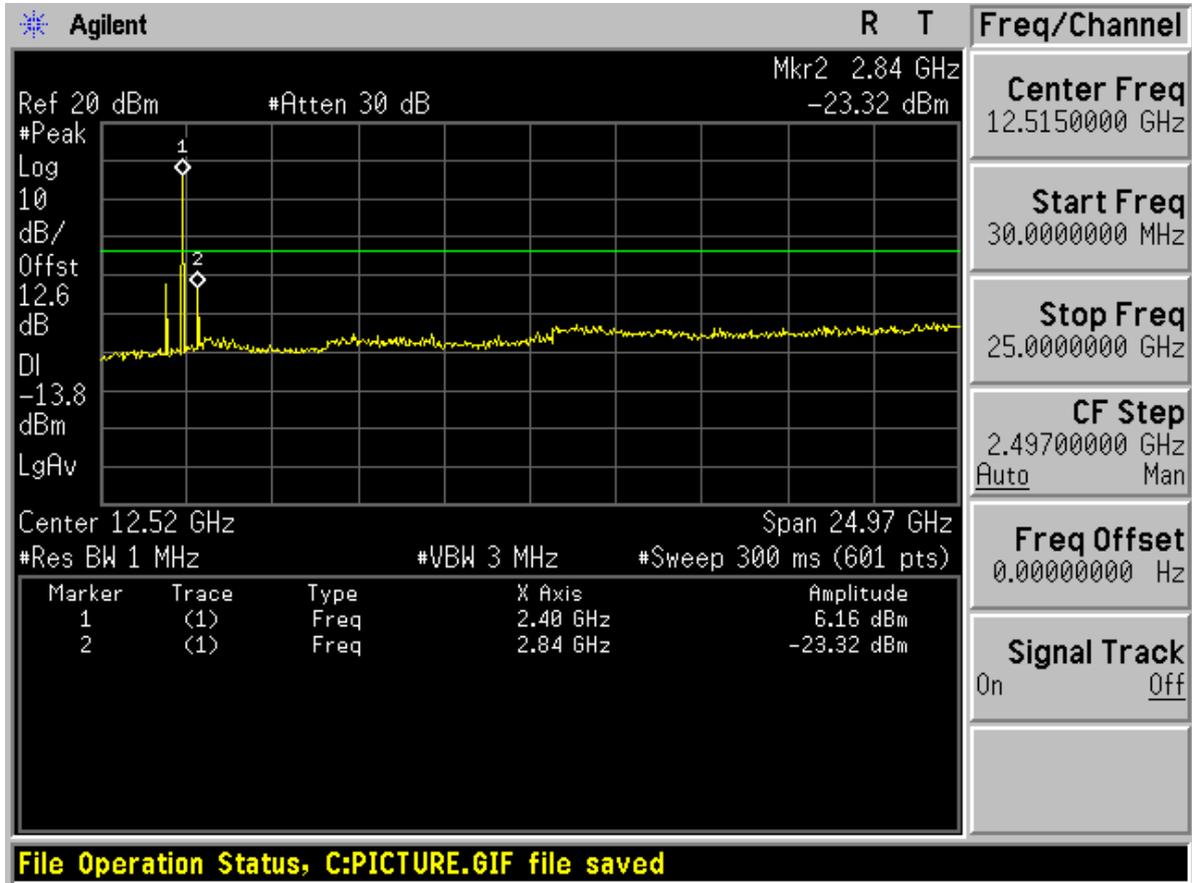


Modulation:  $\pi/4$ -DQPSK

## Channel 0

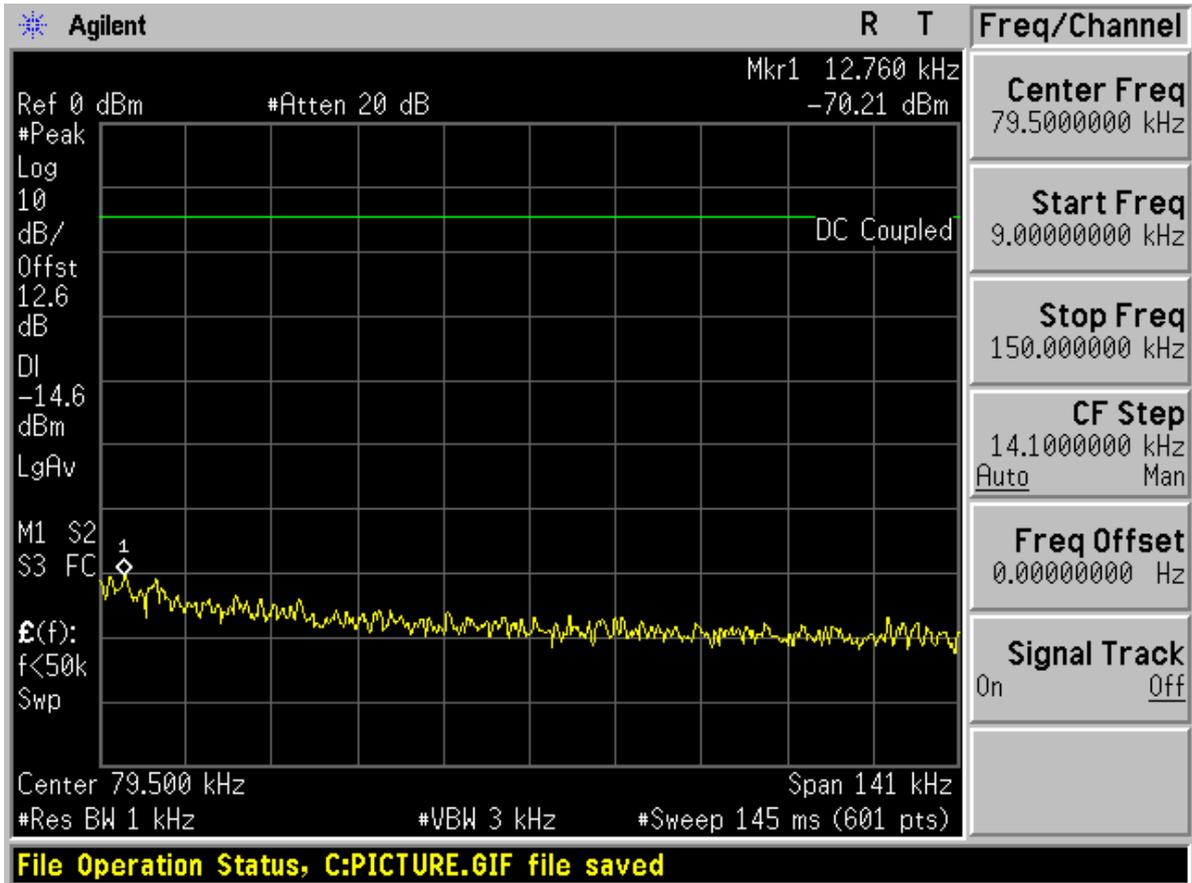


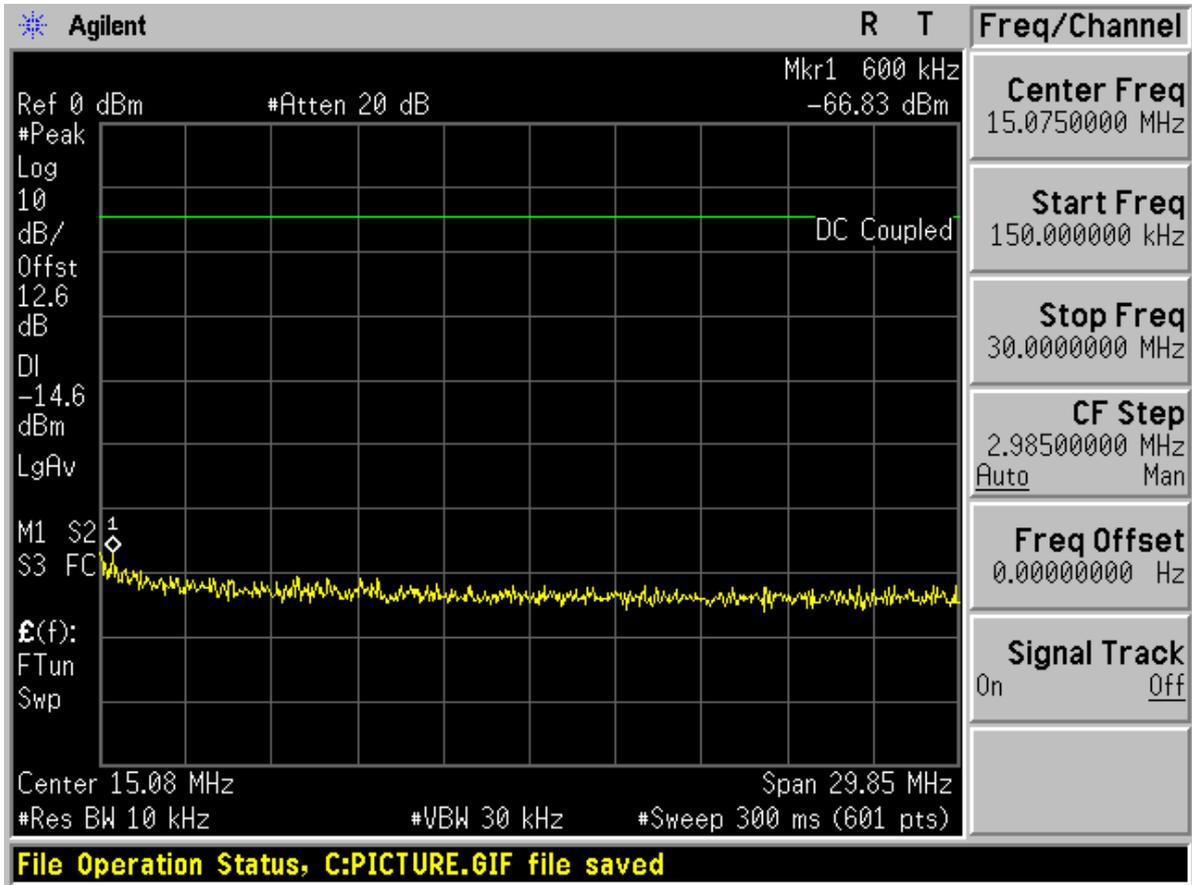


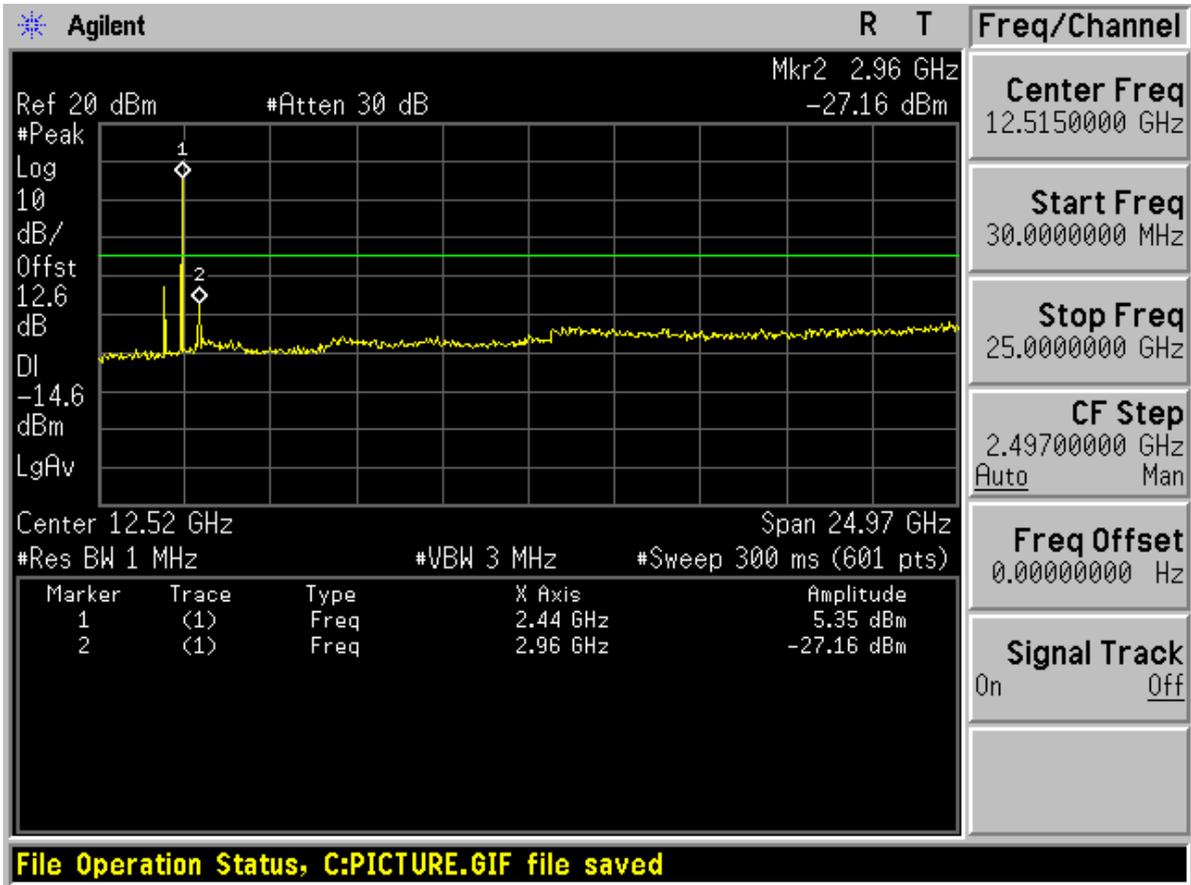




# Channel 40

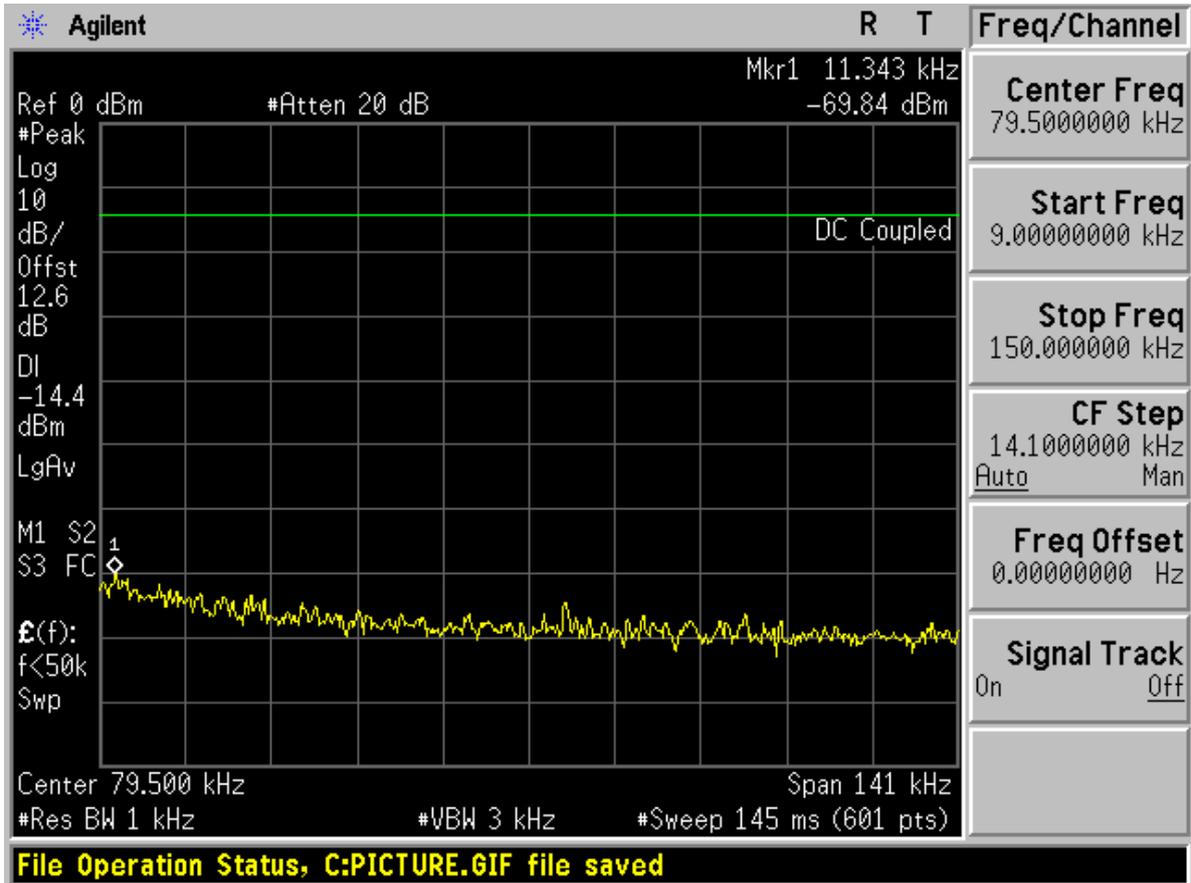


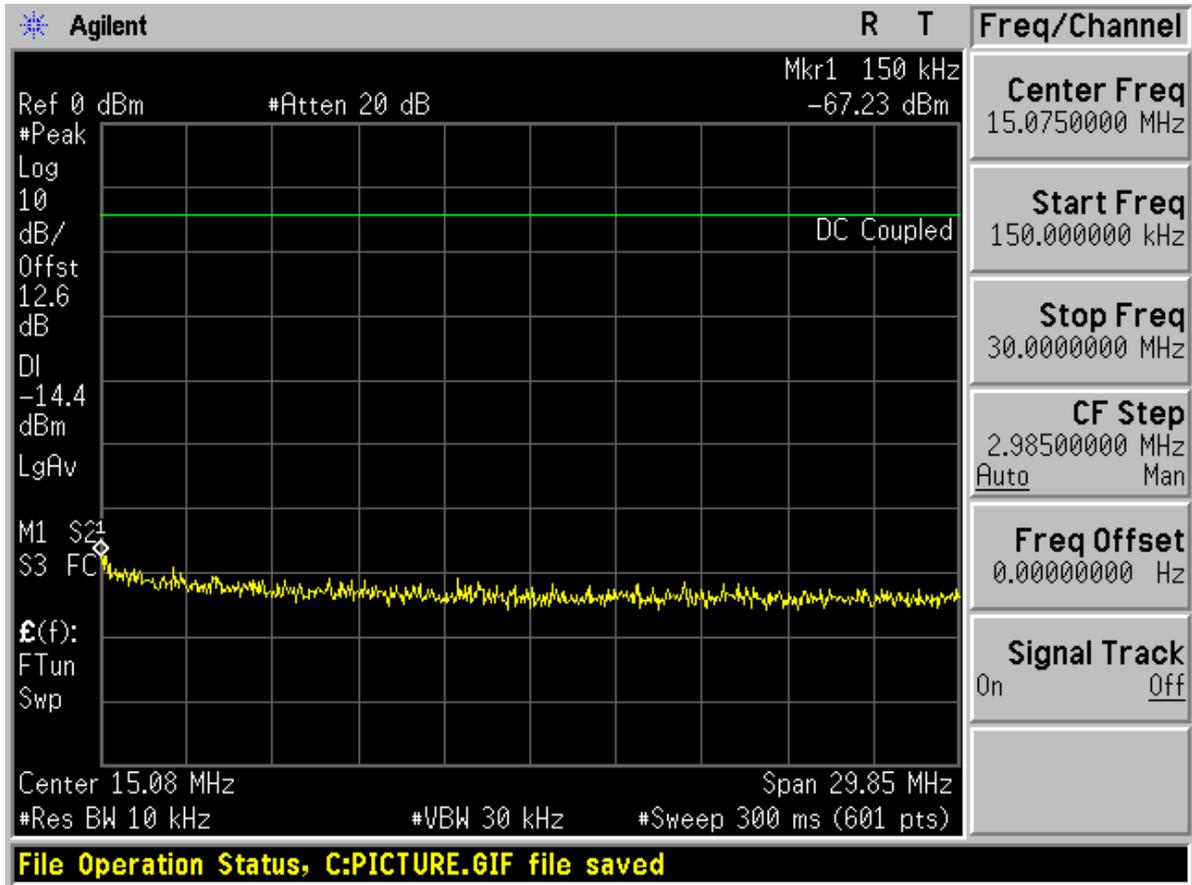


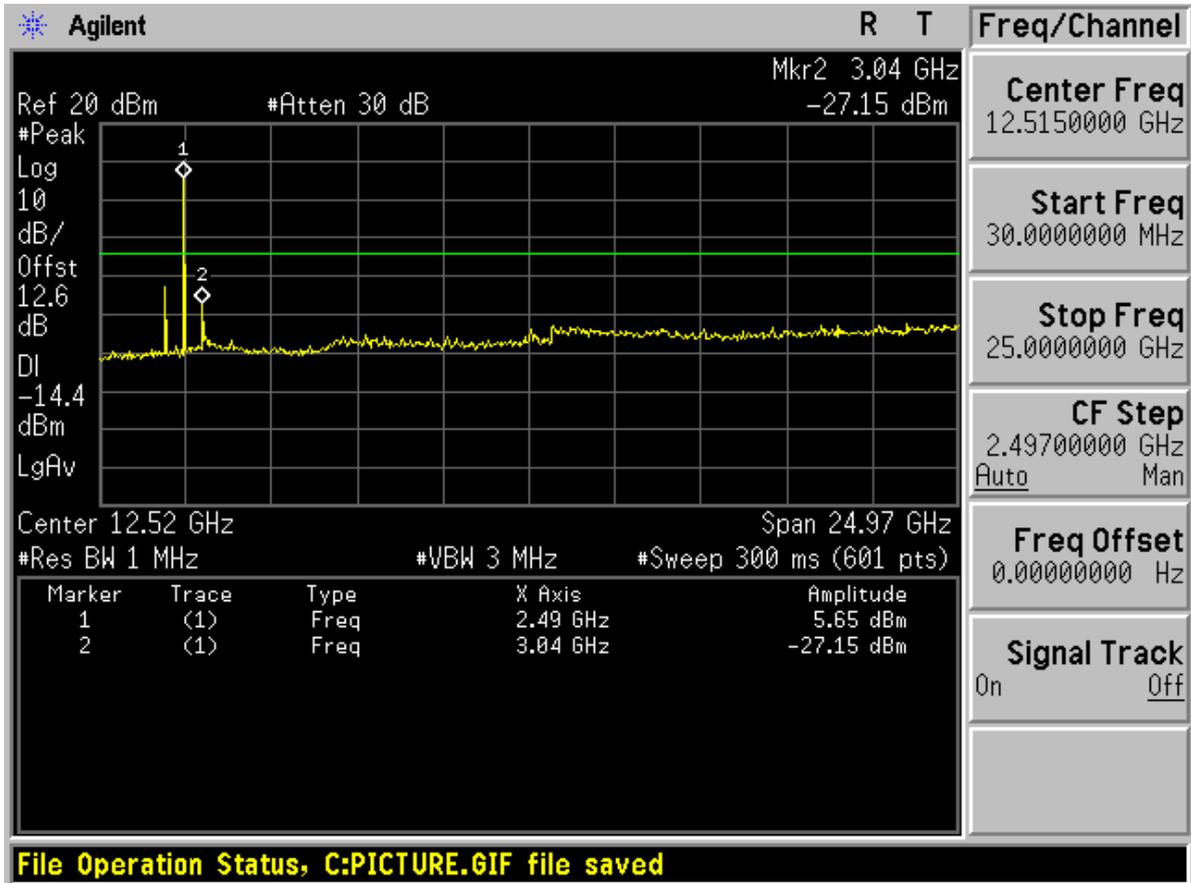




# Channel 78

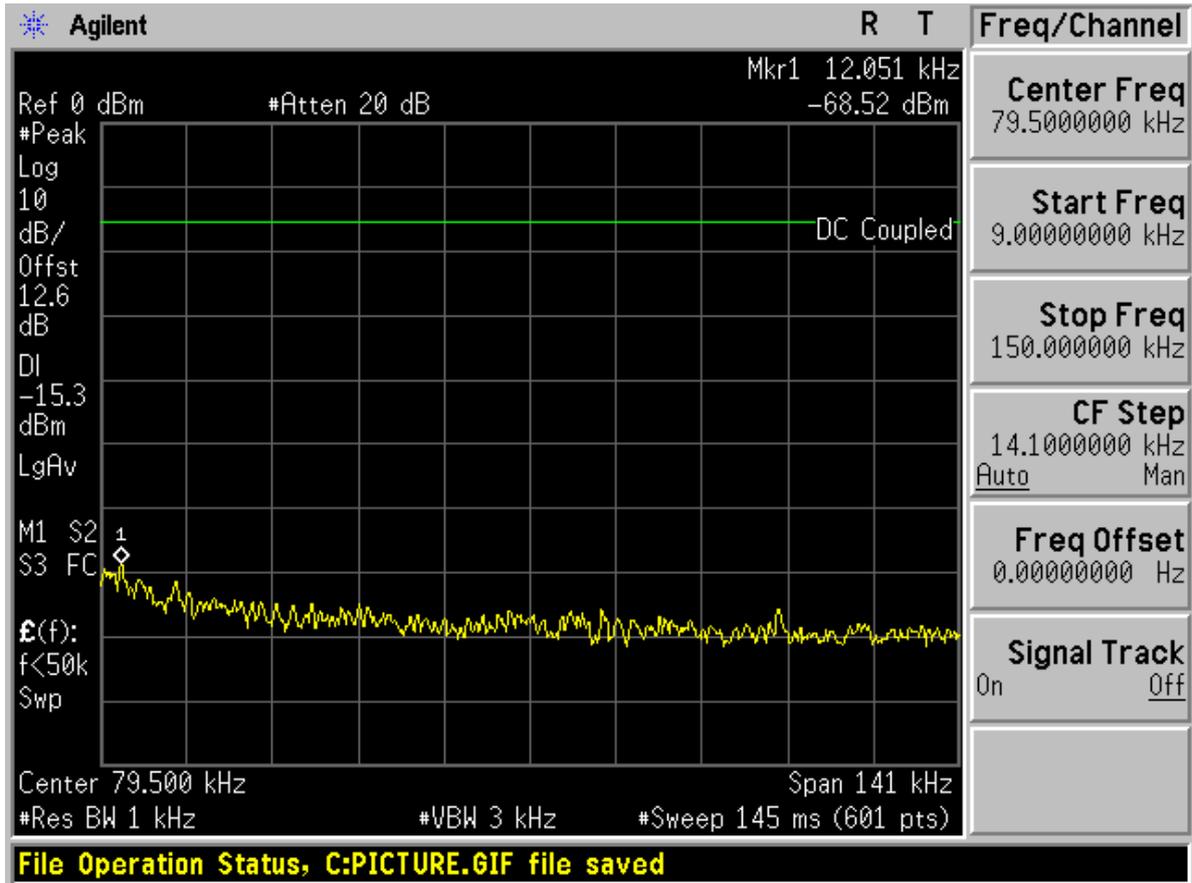


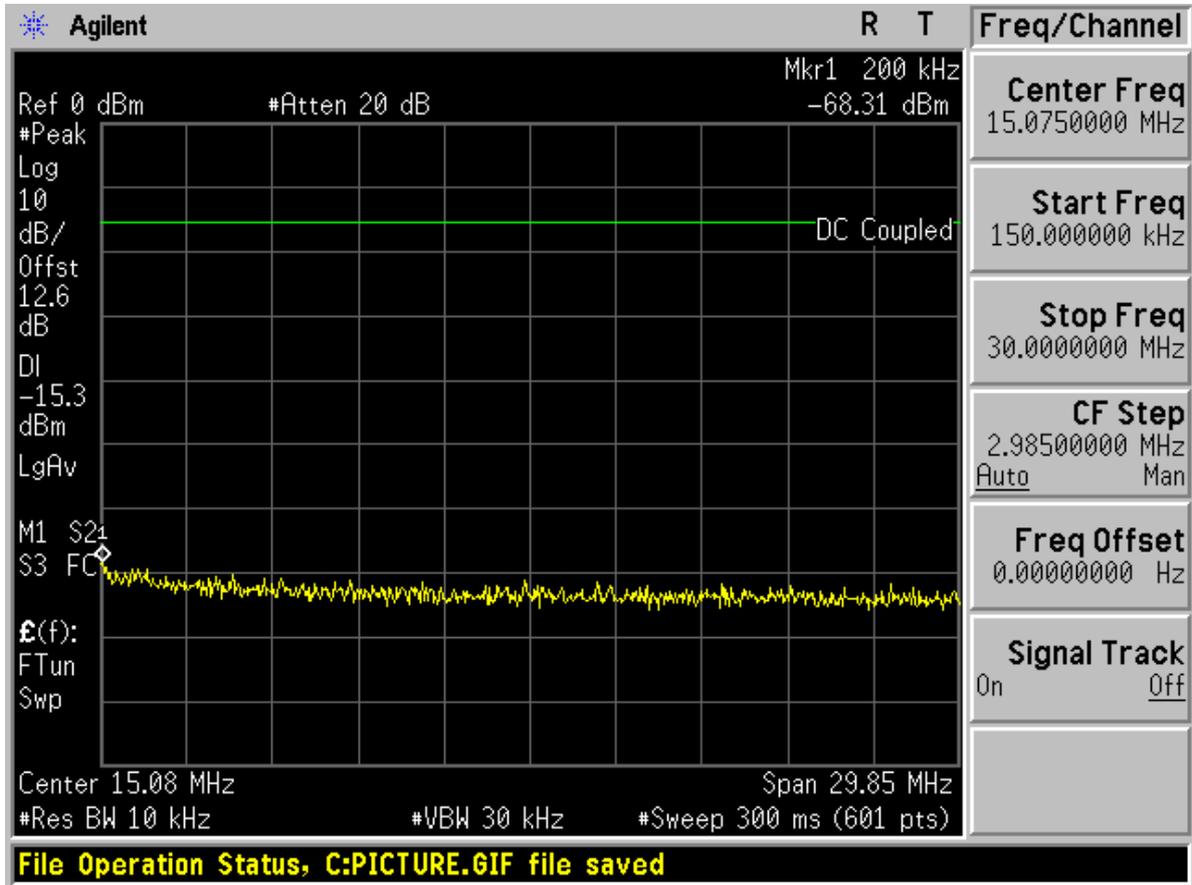


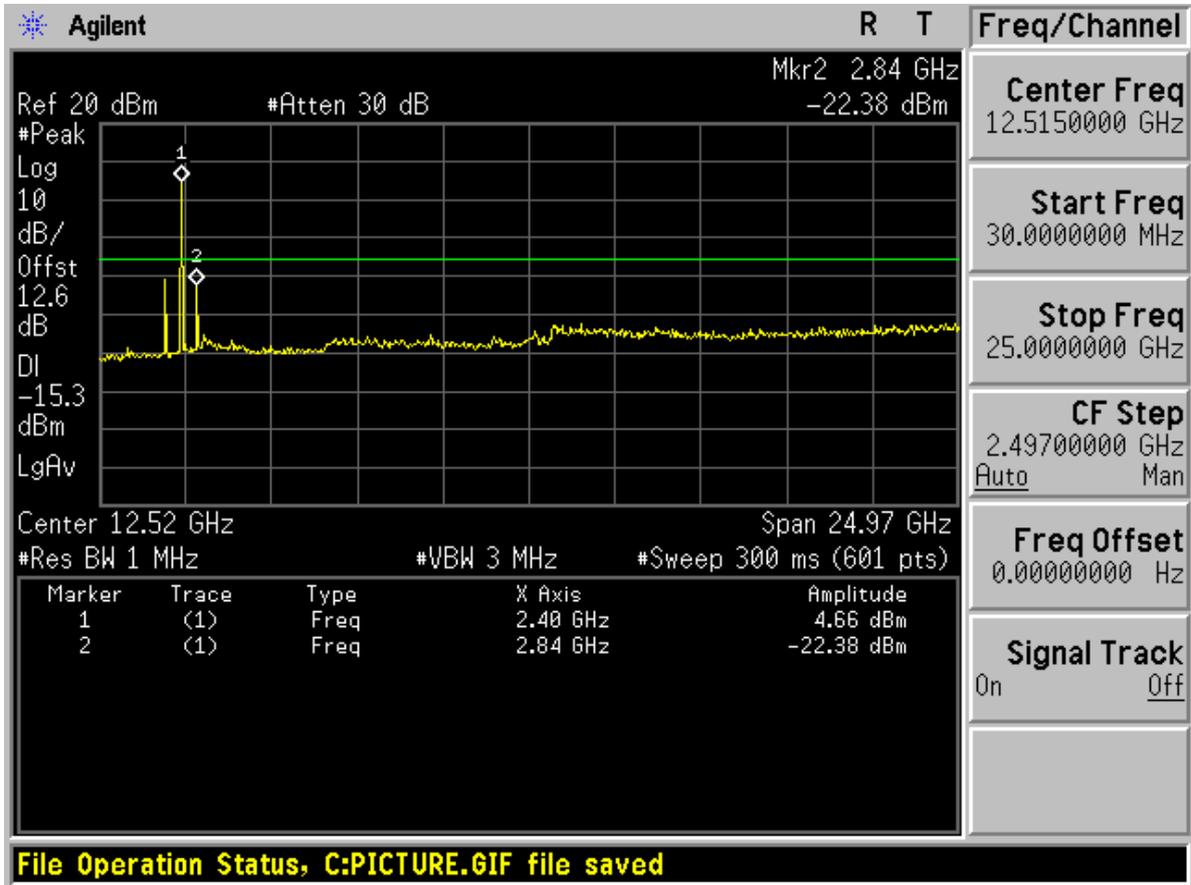




## Modulation: 8DPSK Channel 0

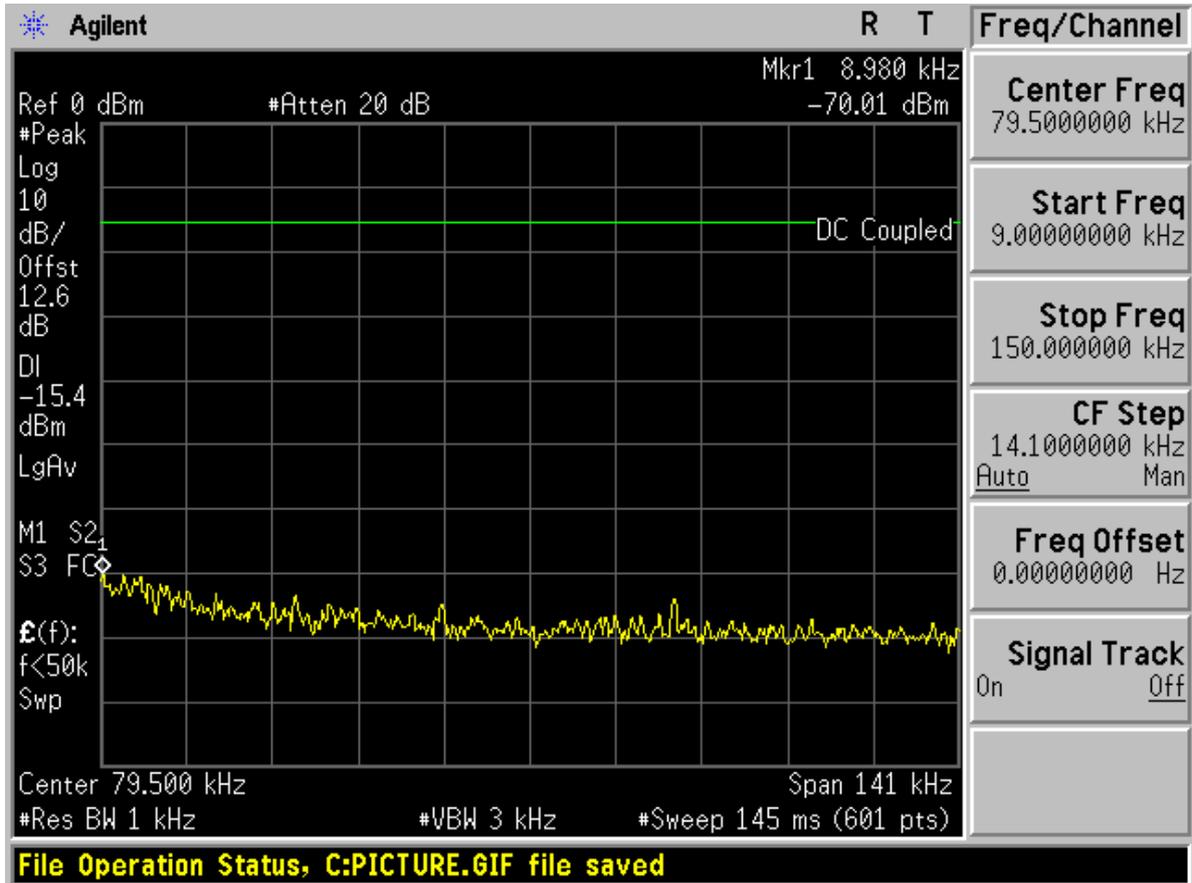


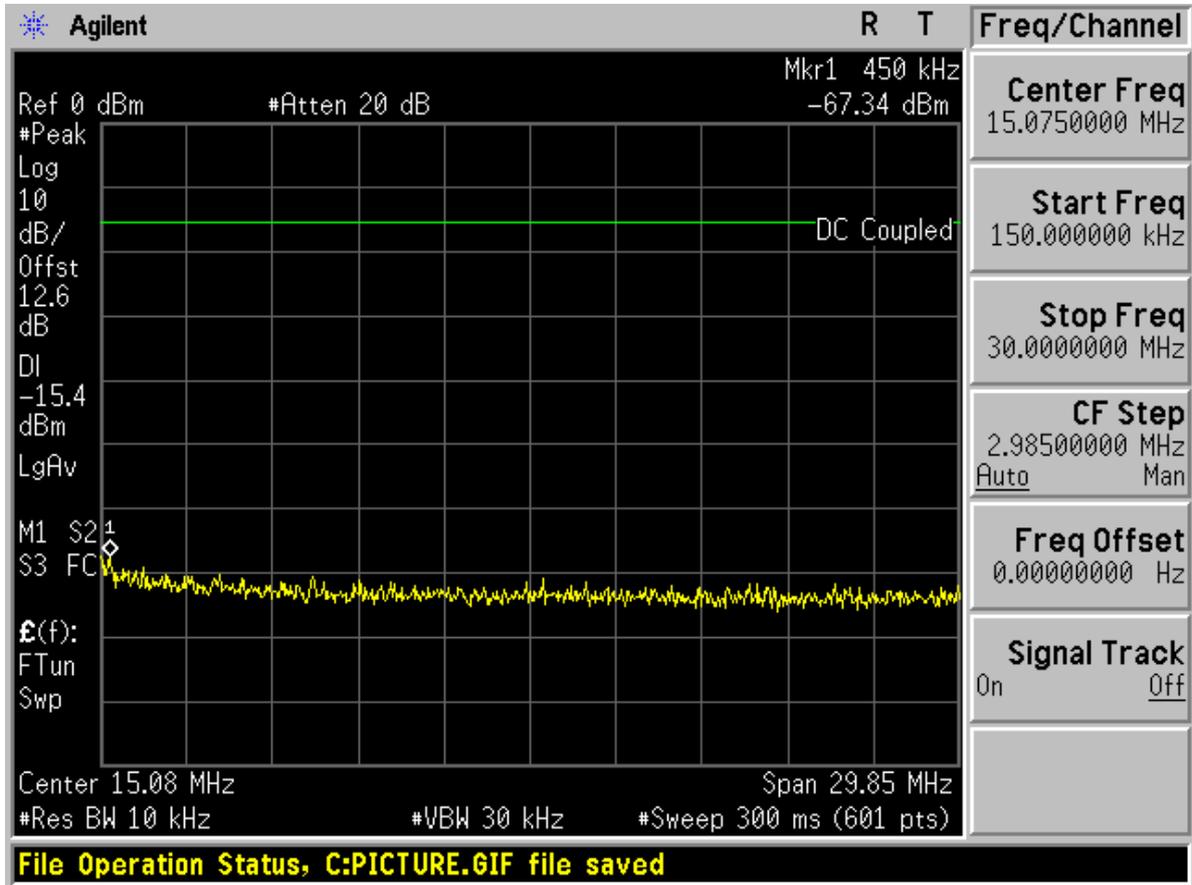


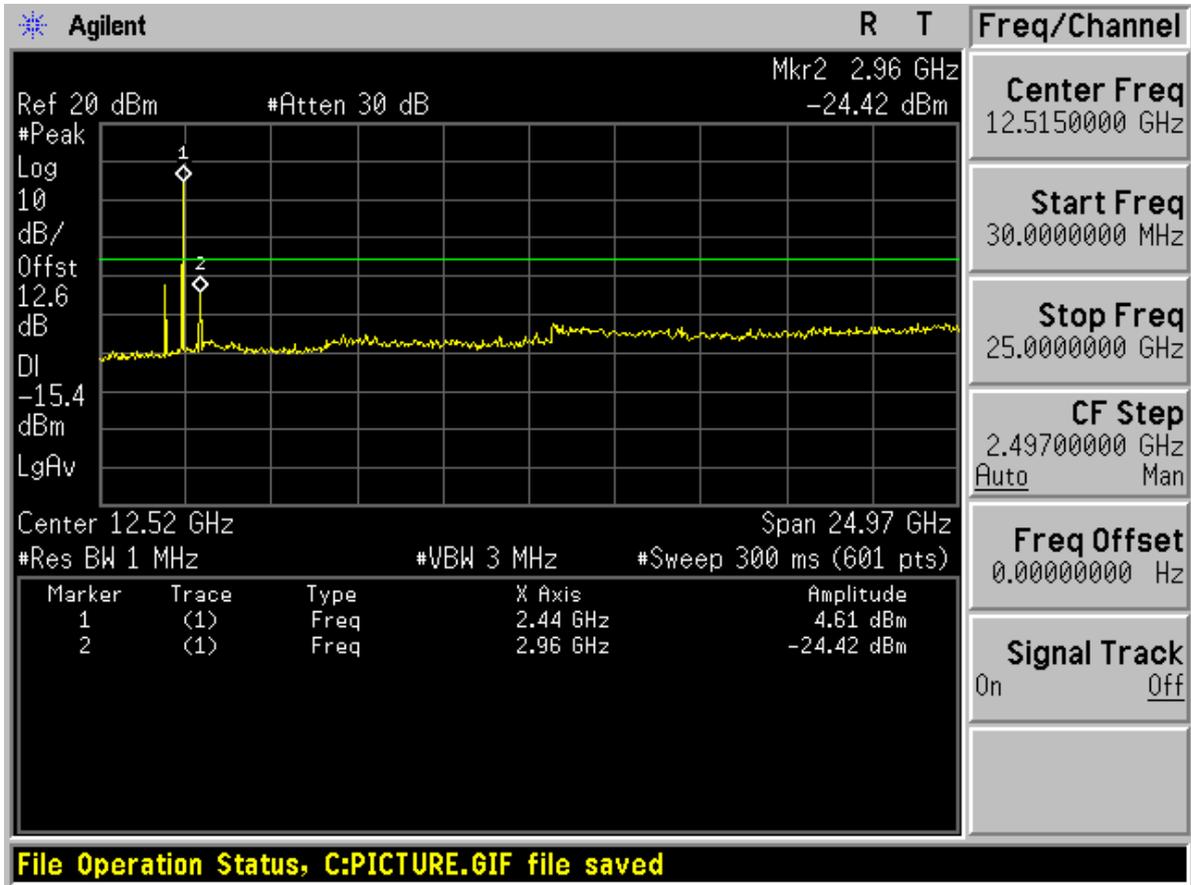




# Channel 40

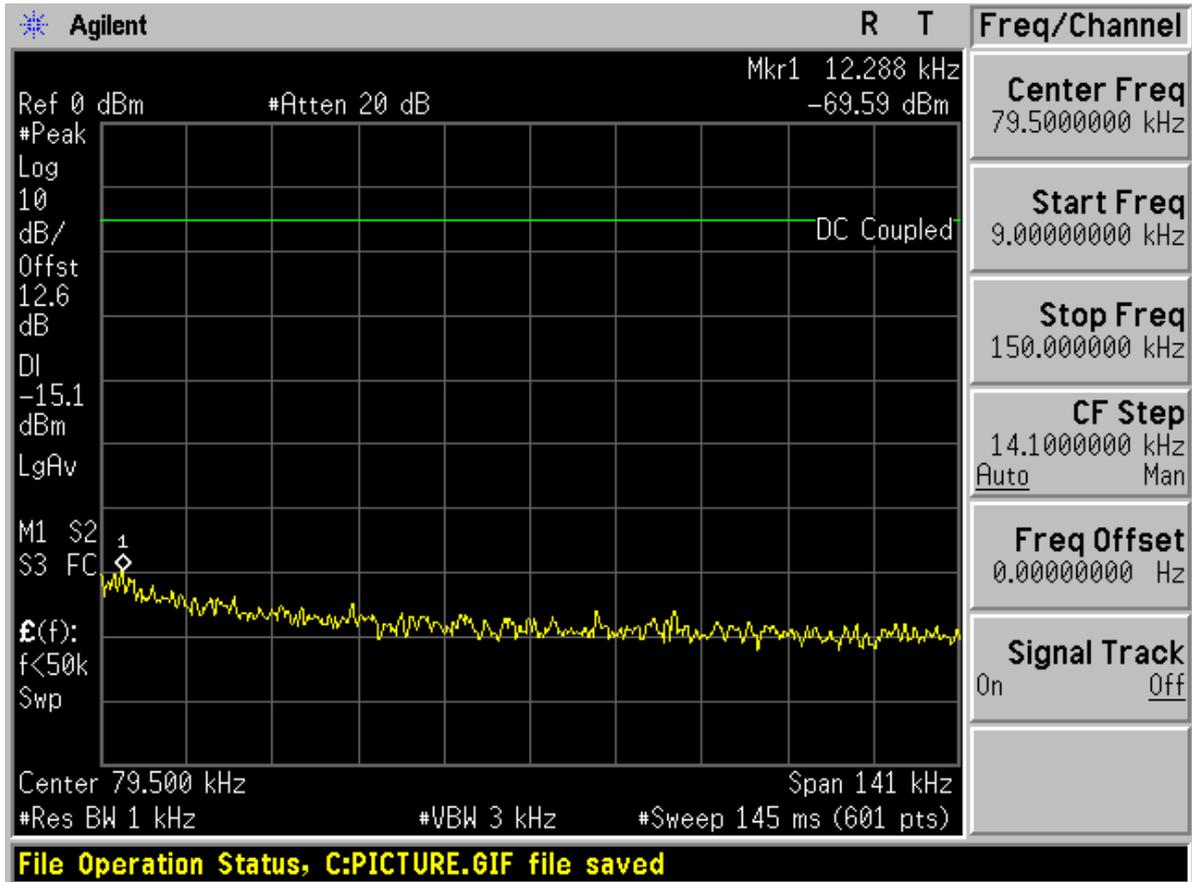


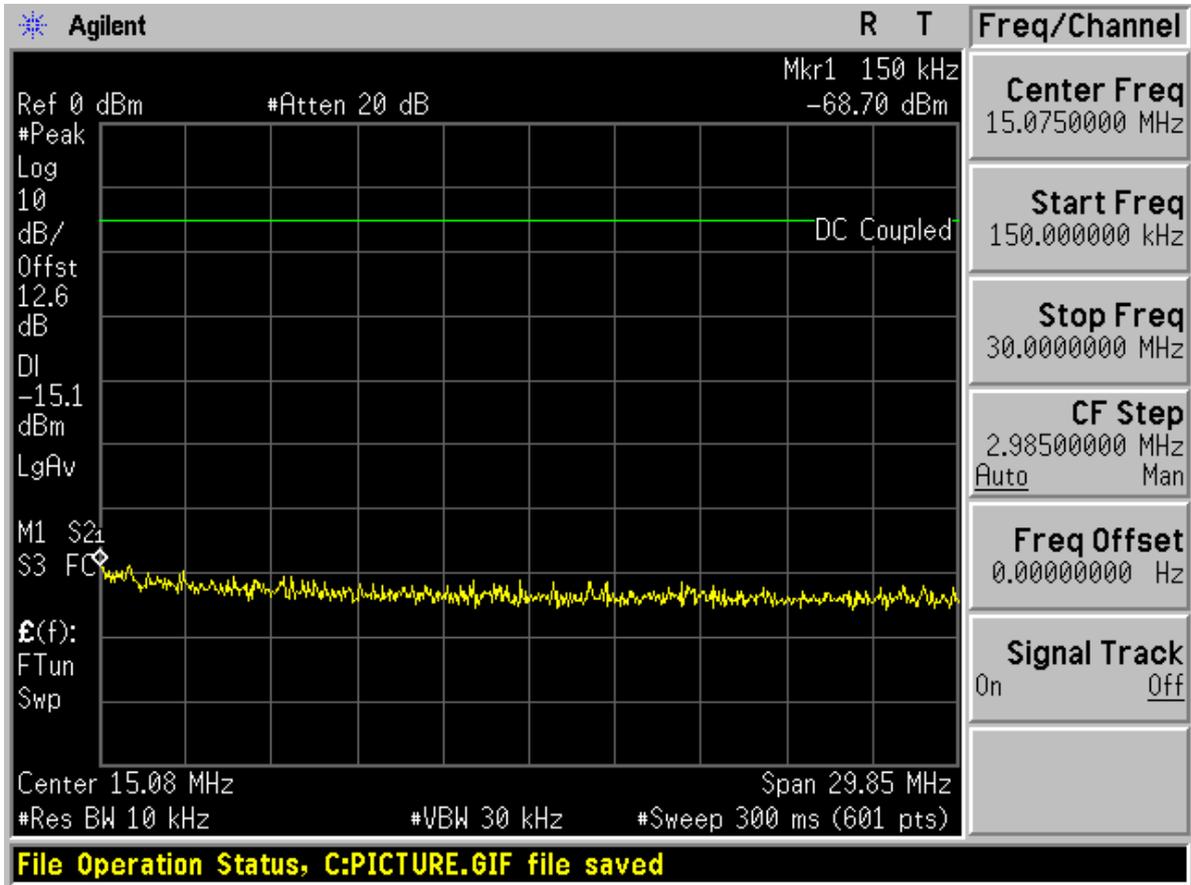


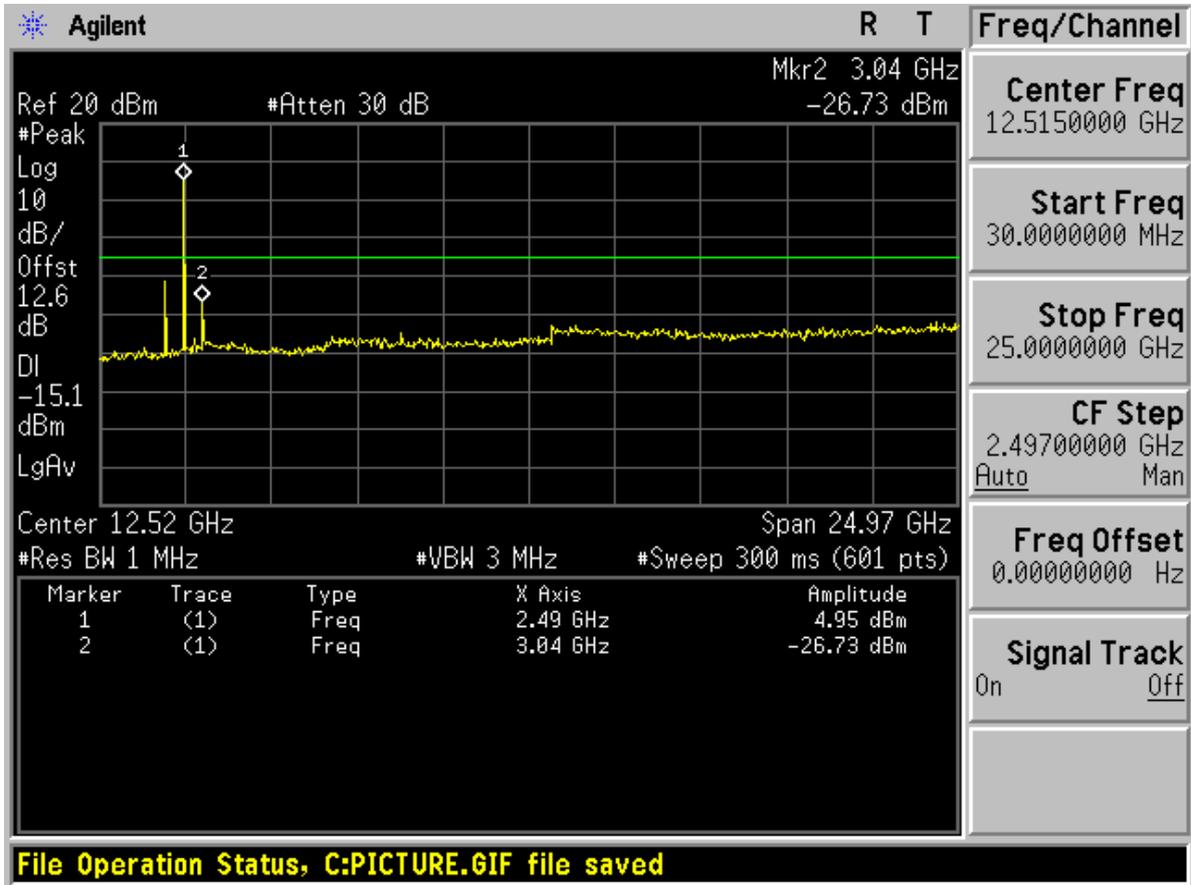




# Channel 78









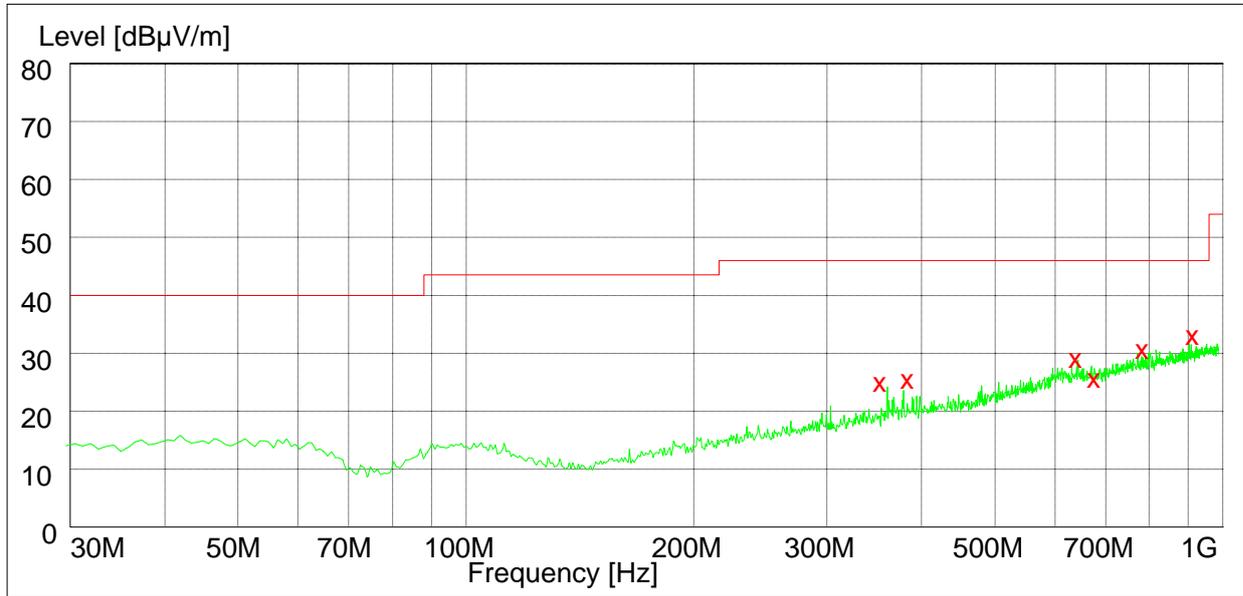
# Appendix H

## Radiated spurious emission

According to FCC Part 15.247 (d) & 15.205 & 15.209



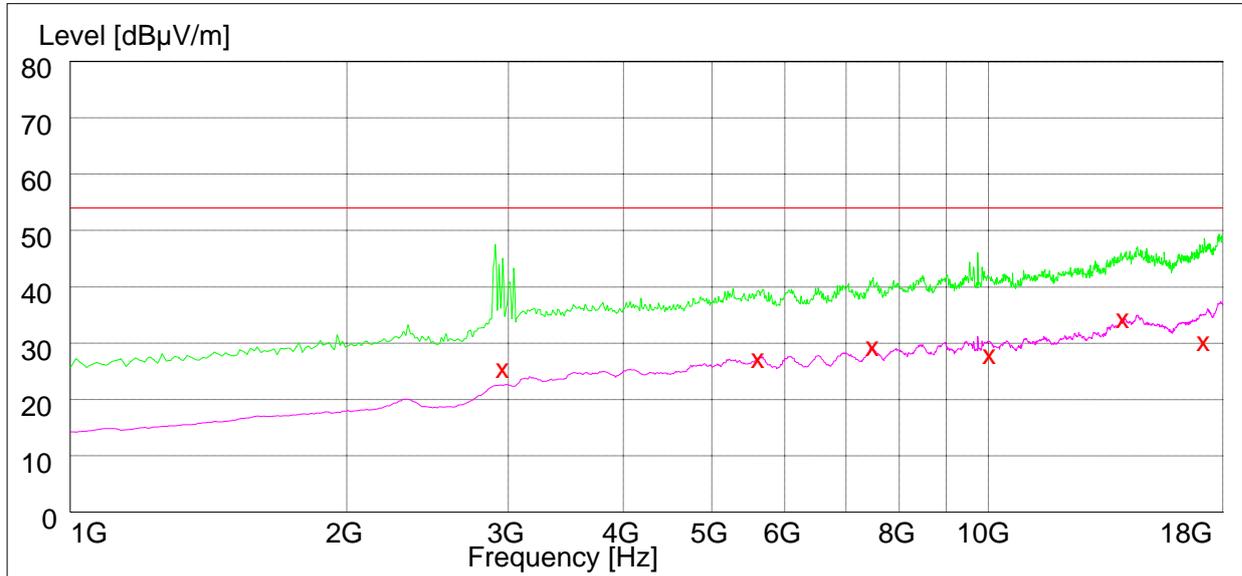
## Channel 0 30MHz to 1GHz



Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Height cm	Azimuth deg	Plarization
326.05000	25.70	17.2	46.0	20.3	100.0	58.00	HORIZONTAL
382.54600	26.20	17.7	46.0	19.8	103.0	198.00	HORIZONTAL
640.29600	29.20	22.6	46.0	16.8	225.0	124.00	HORIZONTAL
660.15400	26.50	22.7	46.0	19.5	155.0	13.00	VERTICAL
798.48800	30.00	25.1	46.0	16.0	149.0	56.00	HORIZONTAL
912.54000	33.90	26.1	46.0	12.1	185.0	97.00	VERTICAL



# 1GHz to 18GHz



Note: Signal suppressed with a 2.4 GHz band rejection filter

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Height cm	Azimuth deg	Polarization
2985.000000	25.60	-9.0	54.0	28.4	108.0	169.00	VERTICAL
5678.500000	28.50	-2.0	54.0	25.5	186.0	99.00	VERTICAL
7493.500000	29.80	2.1	54.0	24.2	86.0	52.00	HORIZONTAL
10000.800000	28.50	5.0	54.0	25.5	189.0	27.00	VERTICAL
15879.000000	35.70	11.8	54.0	18.3	166.0	46.00	HORIZONTAL
17258.500000	30.30	13.4	54.0	23.7	105.0	103.00	HORIZONTAL



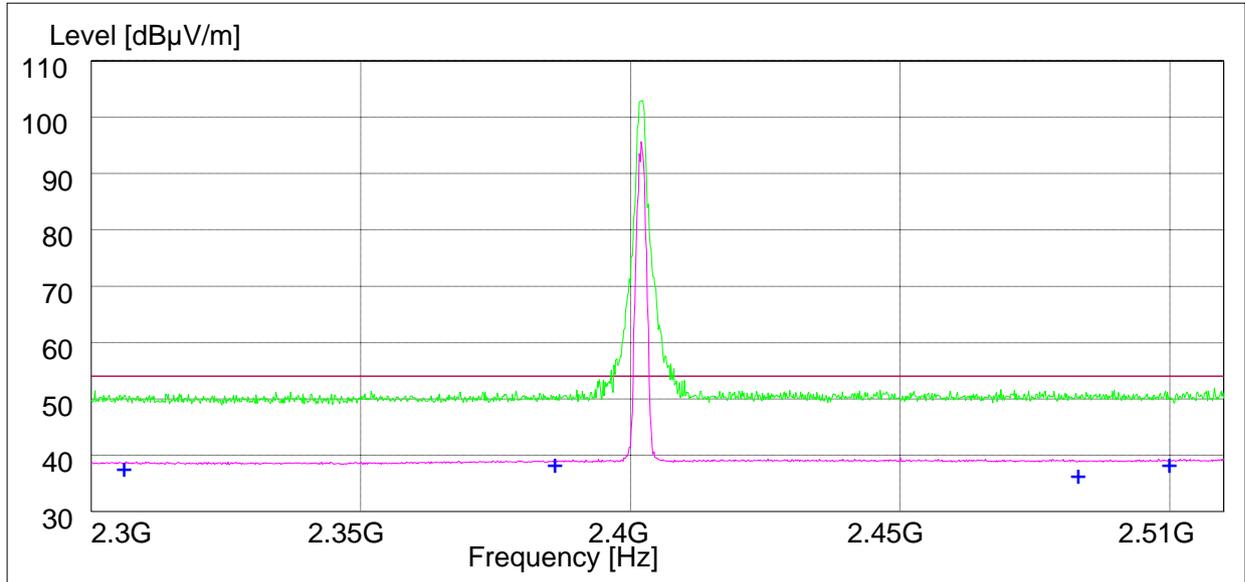
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## 18GHz to 26GHz

Note: No peak found in pre- test.



## 2.30GHz to 2.51GHz

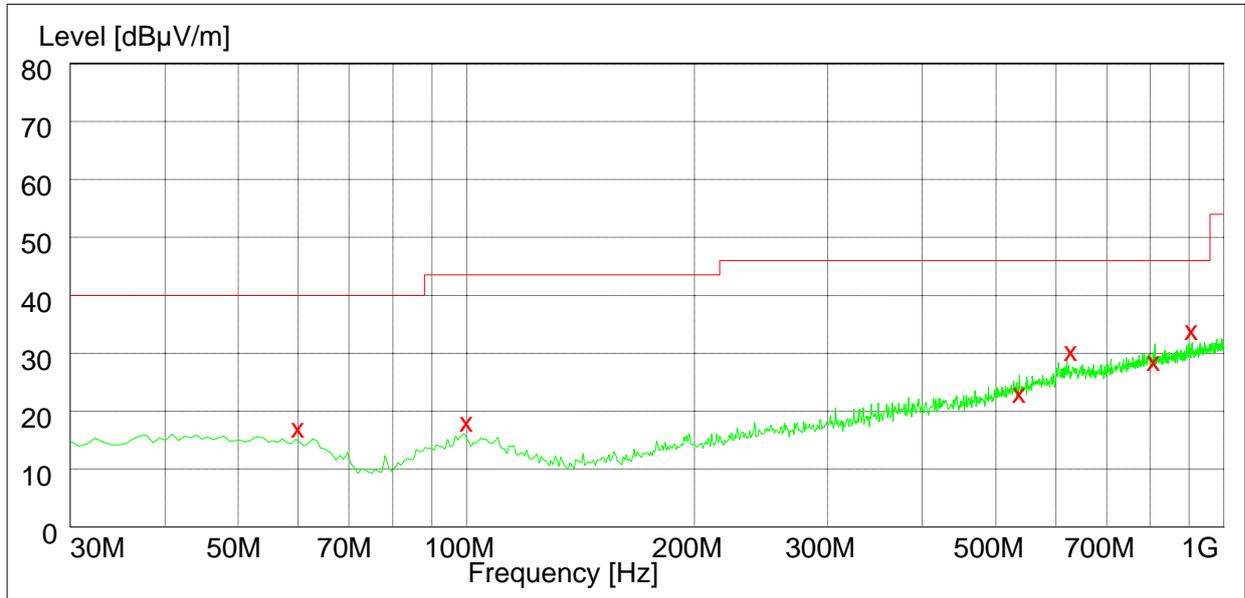


Note: The highest peak exceeds the limit line is carrier frequency.

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Height cm	Azimuth deg	Polarization
2310.000000	38.70	33.0	54.0	15.3	128.0	88.00	VERTICAL
2390.000000	39.10	33.7	54.0	14.9	108.0	125.00	VERTICAL
2483.500000	36.50	33.6	54.0	17.5	156.0	175.00	HORIZONTAL
2500.000000	38.70	33.6	54.0	15.3	168.0	229.00	VERTICAL



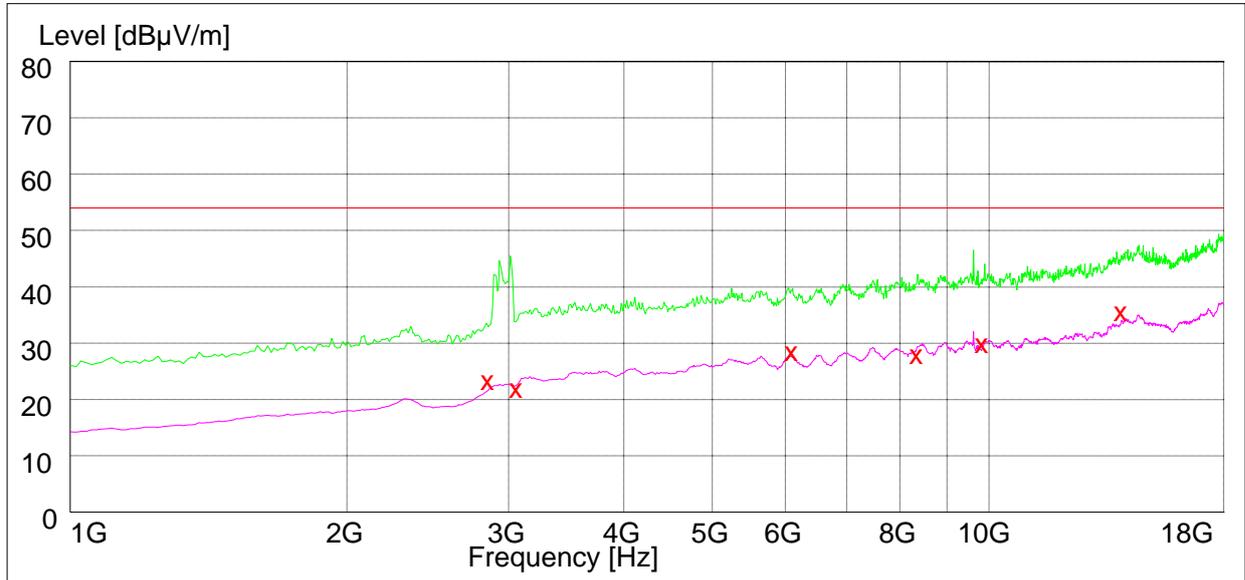
## Channel 40 30MHz to 1GHz



Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Height cm	Azimuth deg	Polarization
60.785000	19.00	11.6	40.0	21.0	98.0	78.00	HORIZONTAL
100.254000	19.80	13.3	43.5	23.7	148.0	25.00	VERTICAL
548.454000	24.80	21.0	46.0	21.2	89.0	257.00	VERTICAL
620.532000	30.40	22.7	46.0	15.6	112.0	146.00	VERTICAL
805.468000	29.80	24.9	46.0	16.2	1780	58.00	HORIZONTAL
908.457000	32.50	25.6	46.0	13.5	125.0	178.00	VERTICAL



## 1GHz to 18GHz



Note: Signal suppressed with a 2.4 GHz band rejection filter

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Height cm	Azimuth deg	Polarization
2957.100000	24.60	-9.4	54.0	29.4	146.0	44.00	VERTICAL
3012.400000	23.40	-9.1	54.0	30.6	121.0	58.00	HORIZONTAL
6005.400000	29.50	-1.6	54.0	24.5	141.0	147.00	VERTICAL
8458.600000	29.20	2.1	54.0	24.8	155.0	13.00	HORIZONTAL
9645.700000	29.90	5.0	54.0	24.1	124.0	96.00	VERTICAL
1548.600000	36.40	11.9	54.0	17.6	135.0	79.00	HORIZONTAL



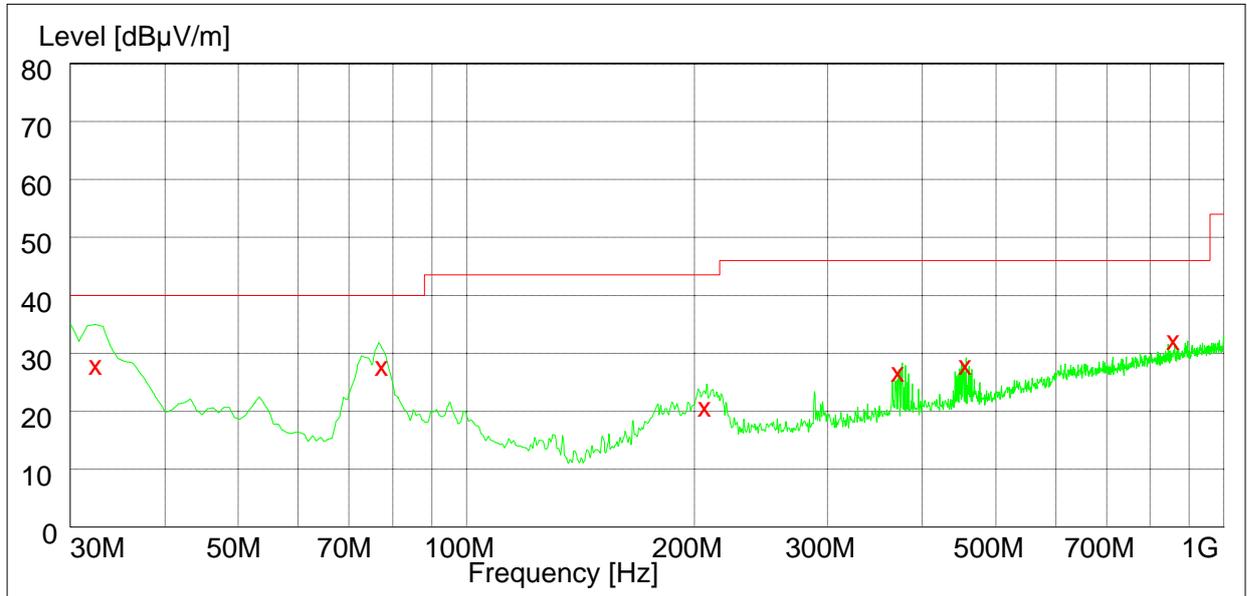
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## 18GHz to 26GHz

Note: No peak found in pre- test.



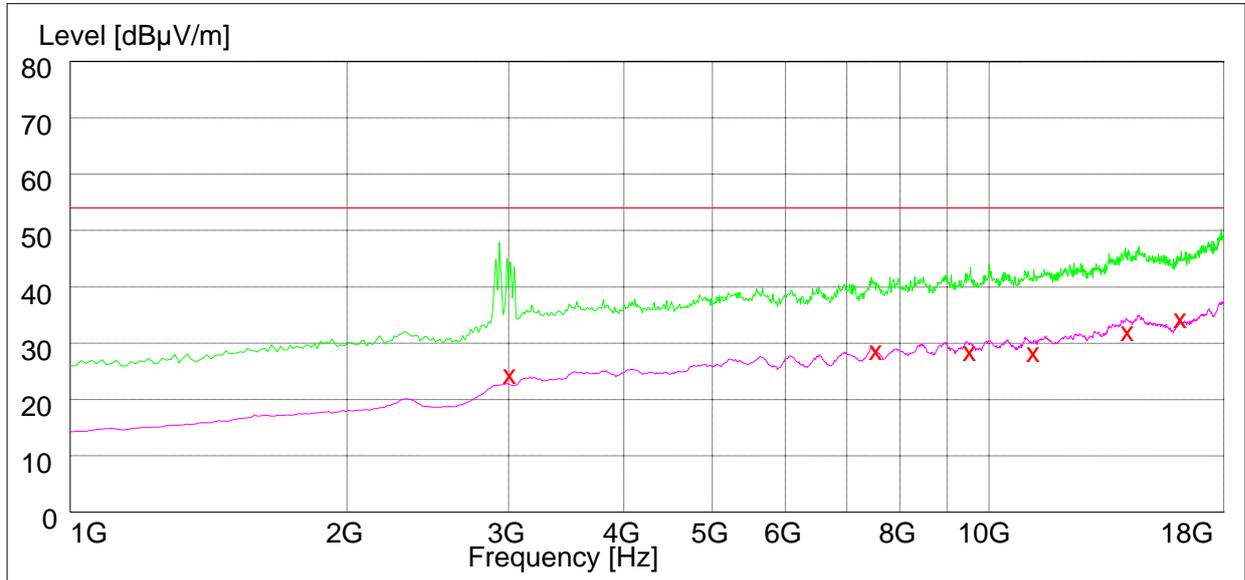
## Channel 78 30MHz to 1GHz



Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Height cm	Azimuth deg	Polarization
33.480000	28.60	11.7	40.0	11.4	121.0	94.00	VERTICAL
78.190000	28.50	12.9	40.0	11.5	78.0	249.00	VERTICAL
202.280000	20.00	10.5	43.5	23.5	89.0	119.00	HORIZONTAL
398.721000	27.9	15.2	46.0	18.1	148.0	275.00	VERTICAL
468.058000	28.90	23.6	46.0	17.1	138.0	277.00	VERTICAL
887.057000	32.50	26.1	46.0	13.5	149.0	289.00	HORIZONTAL



# 1GHz to 18GHz



Note: Signal suppressed with a 2.4 GHz band rejection filter

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Height cm	Azimuth deg	Polarization
3008.400000	24.80	-2.4	54.0	29.2	200.0	318.00	VERTICAL
7452.700000	27.90	0.1	54.0	26.1	147.0	255.00	HORIZONTAL
9486.600000	29.20	3.0	54.0	24.8	200.0	301.00	HORIZONTAL
12651.000000	28.20	6.5	54.0	25.8	240.0	68.00	VERTICAL
15788.100000	32.50	10.2	54.0	21.5	127.0	278.00	VERTICAL
16875.100000	34.10	11.8	54.0	19.9	156.0	307.00	VERTICAL



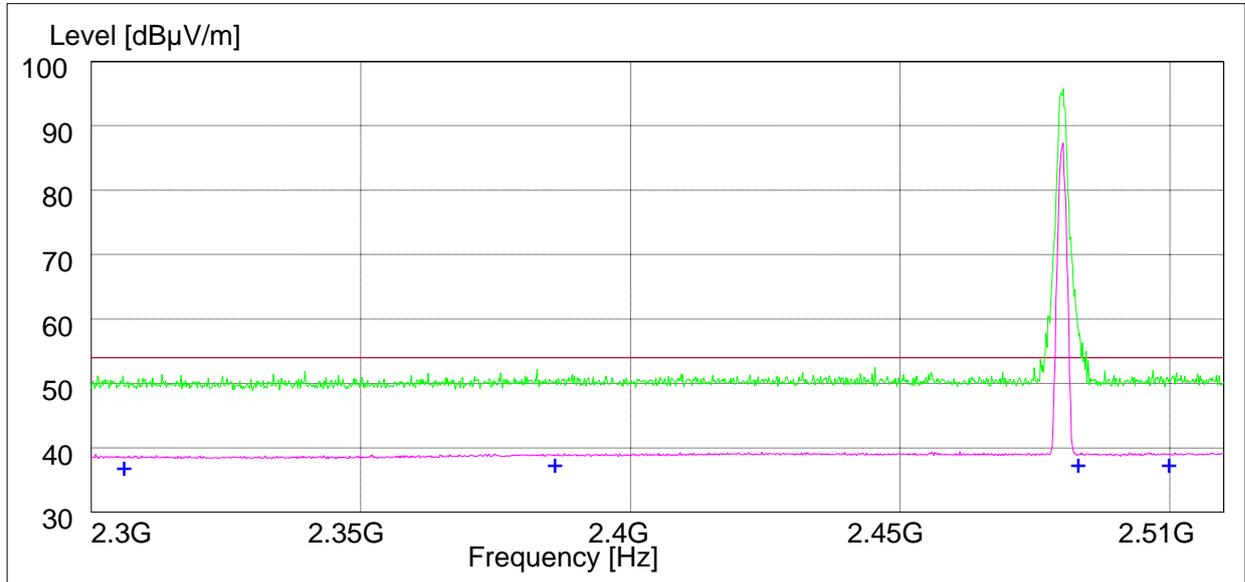
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## 18GHz to 26GHz

Note: No peak found in pre- test.



## 2.30GHz to 2.51GHz



Note: The highest peak exceeds the limit line is carrier frequency.

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Height cm	Azimuth deg	Polarization
2310.000000	37.80	33.1	54.0	16.2	165.0	288.00	VERTICAL
2390.000000	38.80	33.5	54.0	15.2	141.0	78.00	VERTICAL
2483.500000	37.80	33.7	54.0	16.2	145.0	200.00	VERTICAL
2500.000000	38.40	33.8	54.0	15.6	175.0	244.00	HORIZONTAL



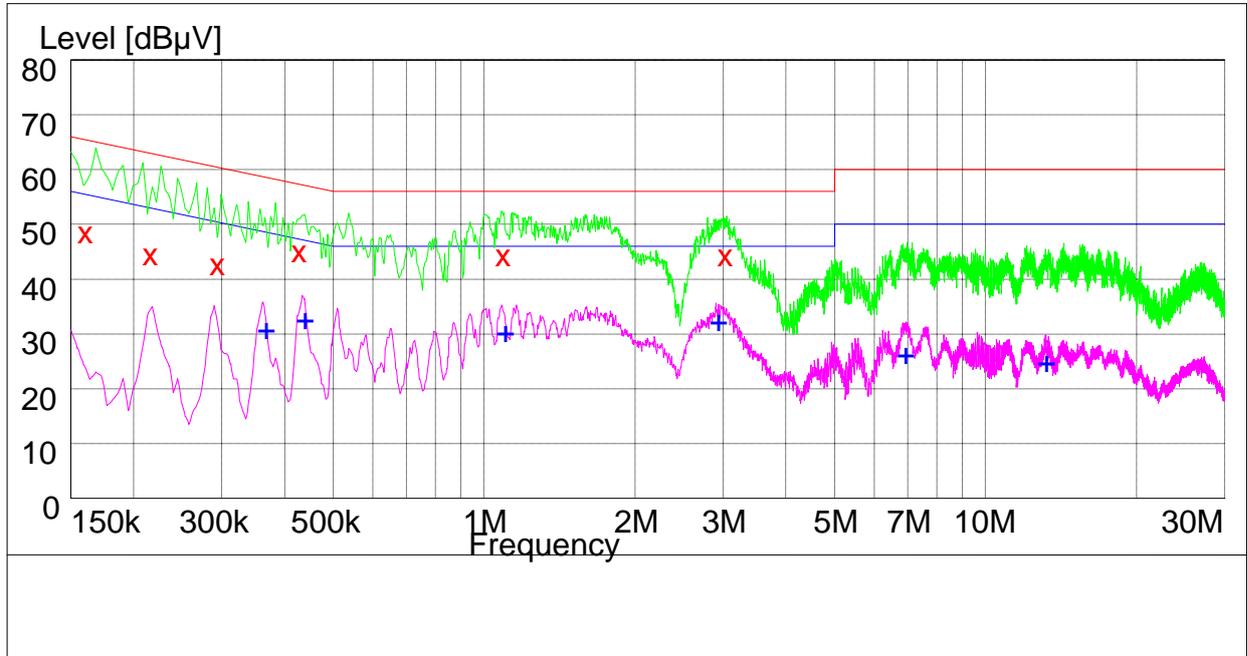
# Appendix I

## Conducted Emission at Power Port

According to FCC Part 15.207



## Channel 40



### MEASUREMENT RESULT: QP Detector

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Line	PE
0.160000	50.30	10.1	66	15.7	N	FLO
0.216000	46.20	10.0	63	16.8	N	FLO
0.294000	44.50	10.0	60	15.5	N	FLO
0.428000	46.80	10.0	57	10.2	N	FLO
1.090000	46.00	10.1	56	10.0	N	FLO
3.020000	46.00	10.2	56	10.0	N	FLO

### MEASUREMENT RESULT: AV Detector

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Line	PE
0.366000	32.60	10.0	49	16.4	N	FLO
0.438000	34.40	10.1	47	12.6	N	FLO
1.098000	32.00	10.1	46	14.0	N	FLO
2.920000	34.10	10.2	46	11.9	N	FLO
6.902000	28.00	10.2	50	22.0	N	FLO
13.160000	26.60	10.3	50	23.4	N	FLO